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TESIS DOCTORAL

The Experience of Cancer Illness

Spain and Beyond During the Second Half of the Nineteenth Century

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Getafe, septiembre de 2017

PhD THESIS

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Getafe (Madrid) – 2017

To my father

ACKNOWLEDGEMENTS

I began to develop a taste for scientific research over the course of my undergraduate studies in Political Sciences and Administration at Complutense University, Madrid. During the summers of 2009 and 2010, two consecutive scholarships granted by the JAE Intro programme of the Spanish National Research Council (CSIC) expanded the scope of my scholarly interests and reinforced my decision to pursue post-graduate studies. In the autumn of 2011, I enrolled in the MA programme in “Cultural Theory and Critique of Culture” at Carlos III University, Madrid. At the same time, I was granted a four-year PhD scholarship by the Spanish FPI-MICINN programme (with reference BES-2011-046132), which provided me with institutional and financial means to carry out the present thesis.

The research I conducted was successively based at the Institute of Philosophy and the Institute of History of the CSIC, along with the Faculty of Humanities, Communication, and Library Science of Carlos III University. In parallel, I had the opportunity to join several foreign academic institutions as a Visiting PhD Student: the Department of History, Classics, and Archaeology of Birkbeck College, University of London; the Research Centre for the History of Emotions of the Max Planck Institute for Human Development, Berlin; and the Department of the History of Science, Harvard University, in Cambridge, Massachusetts. I am grateful to all the establishments of higher education that hosted my PhD research, and to the many experienced and young researchers I met in each of these places, from whom I learned a great deal.

To begin with, this thesis would not have been possible if Professor Javier Moscoso – my main supervisor – had not encouraged me to contribute to such a relevant and sensitive topic as the experience of cancer illness. Whilst it was possible, he offered his guidance and made me feel as an integral part of the research group HIST-EX in History and Philosophy of Experience by counting

on me as a member of the team for the projects on the modern history of emotions (FFI2010-20876) and well-being (FFI2013-46361-R) that he led. Professor Fernando Broncano – my co-supervisor – was also very helpful during the initial phase of my research, which culminated in an MA dissertation on the cultural history of cancer. Furthermore, he provided substantial assistance in bringing this thesis to completion.

All my HIST-EX colleagues taught me something valuable, both in relation to, and beyond the scope of, my PhD project. A number of them even behaved as 'academic siblings' during one period or another of my formative process, including Juan Manuel Zaragoza, Leticia Fernández-Fontecha, Beatriz Pichel, Nike Fakiner, Victoria Diehl, María Gómez Garrido, Dolores Martín Moruno, María González Navarro, Ruth Somalo, Sonsoles Hernández, Amaya García Arregui, and, last but most significant, Violeta Ruiz Cuenca. Within the CSIC, I also had inspiring conversations with scholars working in allied areas – especially with Juan Pimentel, Cristina Jular, and Ángel Alloza – as well as with my fellow PhD candidates Rosana Triviño, Pamela Colombo, Pedro Ochoa, Paula Martos, Victoria Mateos, and Cristina Catalina.

During my research stays abroad, I benefited from the guidance of Professor Joanna Bourke, in the UK; Doctor Bettina Hitzer, in Germany; and Professor David Jones, in the US. Each of them was so kind as to accept supervising my work in progress for some months at their home institution. Their constructive criticism and insightful suggestions were extremely useful for improving several chapters of this thesis. In addition, these scholars gave me the possibility to be part of their vibrant academic communities, where I encountered other brilliant and accessible researchers like Carmen Mangion, Simon Jarrett, Geoff Browell, Rhodri Hayward, Adam Shapiro, Yaara Benger, Rob Boddice, Stephanie Olsen, Anja Laukötter, Allan Brandt, and Michael Knipper, along with many more people I wish I had space to mention.

Outside academia, I am thankful for the understanding and support I have received from my friends and 'guardian angels' all the way through the PhD. I feel lucky to have been surrounded by such incredible people as Andrea, Mònica, Aida, Carlos, Julia, Pablo, Edu, Imène, Carles, Marcos, Irene, Verena,

Jesús, Antonio, and Macu. Finally, my warmest acknowledgements are due to my family at both sides of the Pyrenees. Special mentions go to my cousin Adrián for his cheerful encouragements; to my nephews Daniel and Nicolás for reminding me how important it is to do some things just for fun; to my mother Francine and my sister Irene for their loving care and infinite patience; and last, but most heartily, to my father Jose Manuel, for giving me tons of wise, affectionate advice, and for making my world a safer place to live in.

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PRELIMINARY NOTE

With the aim of contributing to the promotion of a language of equal opportunities, I largely avoided the term *cancer sufferers* in this thesis. Its use was deemed relevant only in connection with the object of enquiry in the last two sections of Chapter 4. Otherwise, I relied on alternative phrasings like *people with cancer* or *people who had cancer*. In every instance, these terms designate individuals who were diagnosed with one form or another of the disease during the period under analysis. Occasionally, they also refer to individuals who believed they had cancer before or regardless of a medical judgment. In no case did I conduct retrospective diagnoses based on current scientific knowledge.

Whenever possible, I quoted and referenced non-English original literature in a published English translation. Most titles of non-English literature cited in-text were given in their language of publication, followed by an English translation in brackets. This was done for the ease of non-bilingual readers. It does not imply that an English translation of the work is available. In order to not lengthen the text excessively, all direct quotes of Spanish and French originals were cited in their English translation, carried out by myself. These translations have been done in good faith, but I do not claim expertise in the field. Any word in italics or small caps included in a direct quotation was the author's original, unless otherwise stated.

Unfortunately, I was unable to locate the copyright holder for Henry Phillips' 1852 portrait painting of Ada Lovelace. To the best of my knowledge, it was sold at Bearnes Hampton & Littlewood, Exeter, UK, during the autumn of 2007. If notified, I will be pleased to add appropriate credit information at the earliest opportunity.

INTRODUCTION

This thesis explores the experience of cancer illness during the second half of the nineteenth century. Whilst the existence of the disease label can be traced back to Ancient Greece, it was not until these decades that the term *cancer* was redefined, within the medical literature, as a synonym for *malignant neoplasms;* namely, a group of pathological conditions characterised by the proliferation of abnormal cells, and deemed curable only through an early and thorough operation. From then on, practitioners, statisticians, and the population at large observed a significant increase in its morbidity and mortality rates. Ultimately, at the turn of the century, cancer emerged as a matter of national interest and governmental concern in all Western countries.

Existing scholarly literature on the history of cancer during the period under analysis have usually focused on the views of scientific researchers and medical practitioners. Although this new contribution takes them into account, it concentrates on the recipients of the treatments; that is, on the people who demanded a cure or, at least, some relief for their symptoms. The interest lies in the thoughts, feelings, and behaviour of the patients; but also, more broadly, on sick people's lives before, asides from, and beyond a consultation with a doctor. It begins with the moment they first noticed an alteration, and continues to the point where their daily routines became significantly altered and the prospect of impending cancer death truncated their life expectations.

Besides assembling fragments of individual stories of illness of both famous and common people, this thesis explores the experience of cancer illness through its cultural objectifications. To put it another way, the research delves into the threads from which cancer narratives were interwoven. In fabric production, the colour scheme and the density of a mesh can be combined in an infinite number of ways, but the varieties of fibres used are limited. Similarly, each experience of cancer considered in full detail was unique, but it also

shared collective features. The core of the evidence belongs to the largely unexplored Spanish context. Nevertheless, it also includes complementary insights from other Western European countries.

Overall, the aims of the present work are threefold. Firstly, it defends a multifaceted approach to the ontology of disease, that allows conceiving illness experience as a proper space of existence of cancer, as significant and distinct as its scientific representation. Secondly, it stands as a case study in the history of experience, positing that the ways in which people diagnosed with cancer could possibly live through their illness were necessarily grounded in the culture they belonged to. Thirdly, using the lenses of a (not so) distant past, its ultimate goal is to favour a reflection on the continuities and discontinuities with our current experience of cancer, be it as patients, carers, or simply concerned individuals.

What Is Cancer?

Within the Tenth Revision of the International Classification of Diseases and Related Health Problems (from now on, ICD-10), the standard nomenclature of medical conditions in the member countries of the World Health Organisation, cancer finds its space in the second chapter, devoted to neoplasms. As a synonym term for "malignant neoplasms", it designates a whole class of diseases sharing a common pathogenesis: "the rapid creation of abnormal cells that grow beyond their usual boundaries, and which can invade adjoining parts of the body and spread to other organs".[1] Above all, the term *cancer* labels a distinct pattern of cellular activity, an ordered sequence of naturally occurring events, whatever the location of the lesion and its symptomatology. Nowadays, this scientific description (given in more or less detail) stands as the most straightforward and widespread option for addressing the issue of the ontology of cancer; or, to put it differently, for providing an answer to the question "What

[1] "Cancer: Fact Sheet Nº 297", World Health Organisation, Media Centre, last modified February 2017, http://www.who.int/mediacentre/factsheets/fs297/en/

is cancer?". However, it is not the only possible way of considering the matter, both historically and in the present.

The findings of paleo-oncology suggest, although tentatively, that cancer is an old *biological process*. Paleo-oncology, as a subfield of paleopathology, is devoted to the study of neoplastic lesions in human remains, most usually from ancient and prehistoric populations. Combining macroscopic observation, radiographic technology, histological examination, and scanning electron microscopic analysis, researchers in this field have performed retrospective diagnosis of malignant neoplasms in a variety of human organs, such as the bones, the breasts, the prostate, the nasopharynx, and the marrow. Recently, a team of scientists reported such findings in a Siberian adult male whose preserved tissues dated back to about 4500 BC. Admittedly, there are grounds for even much earlier cases, but they are considered especially controversial. A significant amount of work has focused on Egyptian and Pre-Columbian mummies, as they usually present well-preserved bones accompanied with adjacent tissue.[2]

In their endeavour, paleo-oncologists acknowledge a number of material constraints. First of all, their work involves a high reliance on bones and a limited access to soft tissues. Secondly, the human remains that they analyse have generally been subjected to a range of chemical, physical, and biological post-mortem alterations. Finally, they face the impossibility of collating a representative sample of the populations they examine. Despite these limitations, their research aims at assessing the epidemiology of malignant neoplasms over the millennia; that is, the influence of variations in genetic, environmental, and demographic factors on the prevalence of cancer. Ultimately, paleo-oncologists engage in the discussion of whether or not

[2] For a synthetic review of the findings of paleo-oncology, see Luigi L. Capasso, "Antiquity of Cancer", *International Journal of Cancer,* 2005, 113(1): 2-13. More recent studies include Mónika Merczi et al., "Skeletal Metastatic Carcinomas from the Roman Period (1st to 5th century AD) in Hungary", *Pathobiology* 81(2) (2014): 100-111, accessed 29th July 2017, doi: 10.1159/000357435; Angela R. Lieverse, Daniel H. Temple, and Vladimir I. Bazaliiskii, "Paleopathological Description and Diagnosis of metastatic carcinoma in an Early Bronze Age (4588+34 Cal. BP) Forager from the Cis-Baikal region of Eastern Siberia", *PLoS ONE* 9(12) (2014), accessed 29th July 2017, doi:10.1371/journal.pone.0113919.

cancers can be appropriately termed as *diseases of civilisation*; namely, as conditions whose morbidity rates rose exponentially after the industrial revolution and in parallel with the significant average increase in life expectancy resulting from demographic transitions.[3]

Strictly speaking, only paleo-oncologists can trace the long-term history of the *cellular disorder* that contemporary scientists label as malignant neoplasms. At the same time, their work can shed no light on the historical *experience* of cancer. For one thing, retrospective diagnoses are generally conducted on human remains of anonymous people. For another, the definition of cancer as malignant neoplasms – that is, as a separate class of diseases showing a same cellular pathogenesis – did not emerge in the medical literature until the mid-nineteenth century. This is not to say that the term *cancer* did not exist earlier. As a diagnostic label, it was first coined as *καρκίνος* (pronounced *karkínos*) and *καρκίνωμα* (*karkínōma*) within the Hippocratic corpus, a compilation of over one hundred and fifty medical treatises written approximately between 420 BC and 350 BC. Nevertheless, the meaning that these words had in Ancient Greece is far from perfectly overlapping with the scientific definition of cancer as a demarcated process of a proliferation of abnormal cells.

It is the proper domain of historians to trace the continuities and discontinuities in the uses of the term *cancer,* along with its synonyms, over the centuries. Consequently, it is History, as an academic discipline, that can address the long-term experience of cancer, though bearing in mind that its past representations do not necessarily match the biological process that we currently designate as a malignant neoplastic lesion. Within the historiography of cancer, this perspective was first suggested in the early 1930s. In a conference on *The Historical Development of the Pathology and Therapy of Cancer* delivered before the New York Academy of Medicine, the Swiss-born historian of medical ideas and practice Henry E. Sigerist asserted that, in studying treatises of medicine from the past, “we want to know whether the disease had the same characteristics in ancient times that it has today,

[3] Capasso, “Antiquity of Cancer”, 2-13.

or whether it has changed its character, as it has happened in many cases".[4] Cancer was a case in point.

As Sigerist detailed, the historian who confronted the writing of physicians of the past had to bear in mind the question "What did they see?", and make an effort to look at cancer through *their* eyes.[5] In his review of ancient medical treatises, he highlighted that the diagnosis of a malignant condition depended on the identification of a specific cluster of signs at the surface of the body and that there were recorded cases of cure. In this respect, he commented that "now, of course, we know that such a tumour in all probability was not cancer"; and also that, in retrospect, "[t]he same word signifies different diseases in different authors".[6] These few insights already provide us with a twofold answer for the issue of the ontology of cancer. Firstly, cancer seems to be a pre-historic cellular pathology, independently of its scientific recognition as such in a specific historical context. Secondly, cancer is an ancient disease label whose criteria of definition have changed over the centuries, in line with the successive ways of understanding disease prevailing in the medical profession and allied scientific disciplines.

The experience of disease that past physicians and surgeons had, in their own terms, has been a concern for the most sophisticated intellectual historians of medicine. Following the early and influential formulation of the Polish historian of medical ideas and practice Ludwik Fleck, their object of enquiry was – and continues to be – the persistent and changing features in the "thought style" (*Denkstil*) of a "thought collective" (*Denkkollektiv*); that is, in the set of assumptions about the normal and pathological body of a group of medical experts who have been trained under a same theoretical framework and interact amongst themselves.[7] With few exceptions, these scholars have examined

[4] Henry E. Sigerist, "The Historical Development of the Pathology and Therapy of Cancer", *Bulletin of the New York Academy of Medicine* 8 (1932): 643.
[5] Ibid., 646.
[6] Ibid., 647.
[7] Ludwik Fleck, *The Genesis and Development of a Scientific Fact* (Chicago and London: The University of Chicago Press, 1979 [1935]), 20-51.

medical representations of cancer in a limited time-period of Western culture.[8] Notable contributions have focused on Ancient Greece;[9] the late Middle Ages;[10] the Early Modern and Modern periods;[11] the 1830s (in the context of the first observations of cancerous cellular tissue under the microscope);[12] and twentieth-century Germany. [13]

In a major report of historiographical trends in cancer academic literature up to the early 1990s, the US historian David Cantor stressed the distinction between an *internalist* and an *externalist* history of the disease (or, depending on the period examined, of a whole class of diseases).[14] The former approach designated the traditionally dominant model of *intellectual history*, mainly concerned with scientific representations of cancer, "often to the neglect of the social, cultural, and economic context".[15] The latter perspective, in contrast, focused on the analysis of this broader framework. At the time, an increasing

[8] For rigorous works tracing continuities and changing features in medical representations of cancer from Antiquity to Modernity, see Leeland J. Rather, *The Genesis of Cancer: A Study in the History of Ideas* (Baltimore: John Hopkins University Press, 1978); Pierre Darmon, *Les cellules folles. L'homme face au cancer de l'Antiquité à nos jours* (Paris: Plon, 1993). A significant number of other scholars have attempted a similar endeavour, but their works often introduce anachronisms, incur in technological determinism, fail to systematically follow a same criterion of analysis, and combine incommensurable sources to build an argument (for instance, the findings of paleo-oncology and ancient medical treatises). As the focus of this thesis is not the intellectual history of cancer, an exhaustive review of this literature exceeds the scope of its introductory section.

[9] Rafael Simón Martín, "El concepto de cáncer en el Corpus Hippocraticum según las voces karkínos y karkinoma", *Medicina & Historia* 2 (2007): 1-15.

[10] Luke Demaître, "Medieval Notions of Cancer: Malignancy and Metaphor", *Bulletin of the History of Medicine* 72(4) (1998): 609-637.

[11] Bettina Hitzer, "Healing Emotions", in *Emotional Lexicons. Continuity and Change in the Vocabulary of Feeling 1700-2000,* ed. Ute Frevert et al. (Oxford: Oxford University Press, 2014), 118-150; Alanna Skuse, "Wombs, Worms and Wolves: Constructing Cancer in Early Modern England", *Social History of Medicine* 27 (2014): 632-648; Alanna Skuse, *Constructions of Cancer in Early Modern England: Ravenous Natures* (Basingstoke and New York: Palgrave Macmillan, 2015).

[12] Leeland J. Rather, Patricia Rather, and John B. Frerichs, *Johannes Müller and the Nineteenth-Century Origins of Tumour Cell Theory* (Canton, MA: Science History Publications, 1986).

[13] Robert N. Proctor, *The Nazi War on* Cancer (Princeton, NJ: Princeton University Press, 1999); Bettina Hitzer and Pilar León-Sanz, "The Feeling Body and Its Diseases: How Cancer Went Psychosomatic in Twentieth-Century Germany", *Osiris* 31(1) (2016): 67-93.

[14] David Cantor, "Cancer", in *Companion Encyclopedia of the History of Medicine,* Vol.1, ed. William F. Bynum and Roy Porter (London and New York: Routledge, 1993), 537-561.

[15] Ibid., 537.

number of scholarly works fell into the domain of *social and cultural history*, opening the path for an exploration of the experience of cancer from a variety of perspectives.[16] From the inside of the discipline, the grounds for this ontological move relied on the adherence to the emergent *social constructionist* approach to the concept of disease.[17] From the outside, it was also indebted to a parallel growing claim, within the clinical realm, for the shift to a *biopsychosocial* approach to medical practice.

In 1992, the US historian Charles E. Rosenberg characterised disease as "an elusive entity", inasmuch as it had come to resist a simple and univocal characterisation.[18] As he synthesised, in a review of the most significant studies in the history of medicine produced within the social constructionist framework during the preceding two decades, the term *disease* had been used to designate, "at once, a biological event, a generation-specific repertoire of verbal constructs reflecting medicine's intellectual and institutional history, an occasion of and potential legitimation for public policy, an aspect of social role and individual – intrapsychic – identity, a sanction for cultural values, and a structuring element in doctor and patient interactions".[19] At the core of Rosenberg's concern was the tension between the biology and the historicity of a disease. On the one hand, a pathological process existed in nature, independently of its scientific visibility. On the other hand, the significance of a disease, in every possible way, was grounded in culture.

Whilst Rosenberg stressed that *disease* was a multi-dimensional notion, other scholarly contributions focused on developing a specific aspect. With regard to the object of this thesis, a most significant publication was Roy Porter's

[16] For a more recent review of scholarly contributions to the history of cancer, also including Ibero-American studies, see Rui Manuel Pinto Costa, "Escrevendo a história do cancro: da situação historiográfica internacional ao caminho por trilhar em Portugal", *Cultura, Espaço & Memoria* 2 (2011): 281-293.

[17] For an analysis of the multiple origins and equally plural orientations of social constructionism, see Ludmilla Jordanova, "The Social Construction of Medical Knowledge", *Social History of Medicine* 8(3) (1995): 361-381.

[18] Charles E. Rosenberg, "Introduction: Framing Disease: Illness, Society and History", in *Framing Disease: Studies in Cultural History,* ed. Charles E. Rosenberg and Janet Golden (New Brunswick, NJ: Rutgers University Press, 1992), xiii. This book chapter is a modified version of a previous article titled "Disease in History: Frames and Framers" that was published *in The Milbank Quarterly,* 1989, 67(1): 1-15.

[19] Rosenberg, "Introduction: Framing Disease", xiii.

programmatic article “The Patient’s View: Doing Medical History from Below”, first published in 1985.[20] In this work, the British social historian of medicine declared the need for a disciplinary move towards a “history of healing”; that is, expanding its horizon beyond the life and works of practitioners to become “largely written from the patient’s point of view”.[21] After all, patients were the necessary other of medical theory and practice. Moreover, whilst physicians and surgeons had no reason to exist without patients, the latter did not systematically rely on professional healers to regain their health or manage their symptoms. Even though Porter did not formulate it explicitly as follows, he was drawing attention to the thoughts, feelings, and behaviour of sick people with regard to their illnesses – or their first person experience – as a proper space of disease existence.

Meanwhile, a number of US practitioners – especially psychiatrists – were also trying to renew the aim of the medical profession. Interestingly, their criticism was equally directed to the narrow notion of *disease* that prevailed during the medical encounter. In April 1977, two ground-breaking articles were published in leading American scientific publications. In the first place, the journal *Culture, Medicine, and Psychiatry* issued a contribution by Leon Eisenberg titled “Disease and Illness. Distinctions Between Professional and Popular Ideas of Sickness”.[22] As this Professor of Psychiatry at Harvard Medical School expounded the problem, “doctors diagnose and treat ‘diseases’”; which, “in the scientific paradigm of modern medicine, are abnormalities in the function and/or structure of body organs and systems”. In contrast, “[p]atients suffer ‘illnesses’”; that is, “experiences of discontinuities in states of being and perceived role performances”.[23] In short, the “biomedical” model of disease was overlooking the “psychosocial context” of life disruption that long-term illness, especially, entailed.

[20] Roy Porter, “The Patient’s View: Doing Medical History from Below”, *Theory and Society* 4(2) (1985): 175-198.
[21] Ibid., 176.
[22] Leon Eisenberg, “Disease and Illness. Distinctions Between Professional and Popular Ideas of Sickness”, *Culture, Medicine, and Psychiatry* 1 [1st April] (1977): 9-23.
[23] Ibid., 9.

Only a week later, the magazine *Science* published an article from George Libman Engel with a strikingly similar orientation. Under the eloquent title "The Need for a New Medical Model: A Challenge for Biomedicine", this renowned psychiatrist at the University of Rochester, New York, also argued for the medical duty of transcending the biomedical model of disease, which almost reduced doctor-patient interaction to the silent mediation of a set of technological instruments measuring deviations from normative physiological variables.[24] The new "biopsychosocial" model of disease that he reclaimed aimed at valuing the voice of the patient, getting to understand "the social context in which he lives", and reassessing "the complementary system devised by society to deal with the disruptive effects of illness, that is, the physician role and the healthcare system".[25] Overall, the demand was for the adoption of a more comprehensive notion of responsibility towards the patients seeking medical aid, so as to embrace "the human experience of the disease", also termed simply as "illness".[26]

In the following years, the distinctions between a *biomedical* and a *biopsychosocial* approach to the notion of disease, or between *disease* and *illness,* gained popularity amongst US practitioners. For instance, in 1986, the gastroenterologist Howard M. Spiro, co-founder of the Yale Programme for Humanities in Medicine, advocated for a new model of medical training focusing not only on *cure* but also on *care,* and stressed, "as have many before me, that the patient's account is still important in suggesting what is wrong with him, what he is *suffering* from".[27] Two years later, Arthur Kleinman, Professor of Medical Anthropology and Psychiatry at Harvard Medical School, went a step further with the publication of *The Illness Narratives: Suffering, Healing and the Human Condition*. For one thing, his book aimed at systematising different forms of *illness meaning*, always at the intersection of the triadic relation between body, mind, and culture. For another, it offered a series of guidelines

[24] George Libman Engel, "The Need for a New Medical Model: A Challenge for Biomedicine", *Science* 4286 [8th April] (1977): 129-136.
[25] Ibid., 132.
[26] Ibid., 131.
[27] Howard M. Spiro, *Doctors, Patients, and Placebos* (New Haven and London: Yale University Press, 1986), 3.

for clinicians willing to adopt a holistic approach to the treatment of the chronically ill.[28]

The parallel ontological moves to a social constructionist comprehension and a biopsychosocial understanding of the concept of disease have had a strong impact in the historiography of cancer, especially since the dawn of the twenty first century. Increasingly, scholars have supported a multi-dimensional view on their object of enquiry. Overall, their contributions stand in line with the following statement of Mel Greaves, Professor of Cellular Biology at the Institute of Cancer Research, London: "What then is a cancer? The answer you may get depends on what you want to know and how you pose the question".[29] To this date, researchers in the field have shown a special interest for the history of breast cancer, within Anglo-Saxon contexts (above all, in the US and the UK), and since the turn of the nineteenth century. Departing from the works of intellectual historians, their studies have given visibility to the voices of a variety of actors, including patients, but also policy makers, industrial lobbyists, environmental advocacy groups, statisticians, alternative healers, non-professional carers, and society at large.

A significant number of publications have focused on the politics of disease control. For instance, in 2006, Kirsten E. Gardner explored "cancer as a public health project" through consecutive education campaigns for the early detection of women's cancers in the twentieth-century United States.[30] A year later, Robert A. Aronowitz published *Unnatural History: Breast Cancer and American Society*, a book focusing on this malignant condition as an increasingly "visible – and contested – public concern".[31] Also in 2007, David Cantor edited a book on the politics of cancer prevention, early detection, and treatment in a comparative perspective between the US and the UK that was simply titled

[28] Arthur Kleinman, *The Illness Narratives. Suffering, Healing, and the Human Condition* (New York: Basic books, 1988).
[29] Mel Greaves, *Cancer: The Evolutionary Legacy* (Oxford and New York: Oxford University Press, 2000), 21.
[30] Kirsten E. Gardner, *Early Detection: Women, Cancer, & Awareness Campaigns in the Twentieth-Century United States* (Chapel Hill: University of North Carolina Press, 2006), 3.
[31] Robert A. Aronowitz, *Unnatural History: Breast Cancer and American Society* (Cambridge: Cambridge University Press, 2007), 1.

Cancer in the Twentieth Century. [32] In 2009, Barbara Ley traced the history of a US women-environmentalist movement who viewed "breast cancer as a societal problem".[33] In 2010, Jennifer Ruth Fosket examined the biomedicalisation of risk through the case study of the controversy over the consideration of "Breast Cancer Risk as Disease".[34] As a last example, in 2011, Tom Koch outlined a history of cancer as "a statistical event".[35]

In the domain of doctor-patient interaction, a number of publications are equally worth noting. In 2001, Barbara Clow issued the book *Negotiating Disease: Power and Cancer Care, 1900-1950,* which delved into Canadian patients' expectations and decisions with regard to their therapeutic options.[36] In 2003, James S. Olson published *Bathsheba's Breast: Women, Cancer, and History,* a book dealing with "the gender dynamics of the disease – female patients and male physicians – … shaping perceptions of the disease and its treatment".[37] In 2004, Birgit Whitman presented a PhD thesis at Glasgow University titled "Breast Cancer. Patient's Narratives and Treatment Methods*"* that followed "Roy Porter's research agenda" and stood in line with the demand of the latest British NHS plan for "a health service with a stronger patient focus".[38] In 2012, Carsten Timmermann and Elizabeth Toon co-edited the book *Cancer Patients, Cancer Pathways: Historical and Sociological Perspectives,* which aimed at "explor[ing] this interface between the trajectories of individuals and the routines of research, therapy, and care".[39]

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[32] David Cantor ed., *Cancer in the Twentieth Century* (Baltimore and London: John Hopkins University Press, 2008).
[33] Barbara Ley, *From Pink to Green: Disease Prevention and the Environmental Breast Cancer Movement* (New Brunswick, New Jersey: Rutgers University Press, 2009), 8.
[34] Jennifer Ruth Fosket, "Breast Cancer Risk as Disease: Biomedicalizing Risk", in *Biomedicalization: Technoscience, Health and Illness in the US,* ed. Adele E. Clarke et al (Durham and London: Duke University Press, 2010), 331-352.
[35] Tom Koch, "Cancer as Cholera", in *Disease Maps: Epidemics on the Ground* (Chicago and London: The University of Chicago Press, 2011), 245-274.
[36] Barbara Clow, *Negotiating Disease: Power and Cancer Care, 1900-1950* (Montreal, McGill Queens University Press, 2001).
[37] James S. Olson, *Bathsheba's Breast: Women, Cancer, and History* (Baltimore & London: The John Hopkins University Press, 2002), ix.
[38] Birgit Whitman, "Breast Cancer. Patients' Narratives and Treatment Methods*"* (PhD thesis, Glasgow University, 2004) 8.
[39] Carsten Timmermann and Elizabeth Toon, eds., *Cancer Patients, Cancer Pathways: Historical and Sociological Perspectives* (Basingstoke and New York: Palgrave Macmillan, 2012), 3. Within the French context, the contributions of Nahema Hanafi

Finally, the most significant academic contributions to the past experiences of people with cancer may well have come from the history of emotions, a flourishing sub-field of cultural history, as the British scholar Peter Burke already argued more than a decade ago.[40] In 2005, Joanna Bourke dedicated a chapter of her book *Fear: A Cultural History* to exploring patients' feelings of anxiety towards the diagnosis, symptomatology, and prognosis of cancer in the second half of the twentieth century.[41] In 2013, Marjo Kaartinen's book *Breast Cancer in the Eighteenth Century* partly focused on "the ways in which those who had cancer or suspected to have cancer dealt with this illness".[42] A year later, Javier Moscoso's contribution to the collective volume *Pain and Emotion in Modern History* pointed to the existence of a "moral economy of hope" in recovering from cancer in Early Modern Europe.[43] Also in 2014, Bettina Hitzer examined shifting "emotional regimes" of cancer patients in West Germany and the United States in a book chapter of the edited volume *Science and Emotions after 1945: A Transatlantic Perspective.*[44]

In sum, the historiography of cancer has encompassed the successive perspectives on the ontology of *disease* that scholars have endorsed since the configuration of the history of medicine as an academic discipline. For one

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and Elsa Nicol to the collective volume *Lutter contre le cancer (1740-1960)* that Didier Foucault coordinated (Toulouse: Privat, 2012) equally probed into the patient's side of the medical encounter; Hanafi, "Le cancer à travers les consultations épistolaires envoyées au Dr. Tissot (1728-1797)", 95-121; Nicol, "Les cancers féminins: entre culpabilité et nouveaux espoirs (1789-1880)", 123-148

[40] Peter Burke, *What Is Cultural History?* Second Edition (Cambridge and Malden, MA: Polity, 2008 [2004]), 102-112.

[41] Joanna Bourke, *Fear: A Cultural History* (London: Virago Press, 2006 [2005]), 295-321.

[42] Marjo Kaartinen, *Breast Cancer in the Eighteenth Century* (London and Brookfield, VT: Pickering & Chatto, 2013), ix. From the same author, see also "Pray, Dr, Is There Reason to Fear a Cancer? Fear of Breast Cancer in Early Modern Britain", in *A History of Emotions, 1200-1800,* ed. Jonas Liliequist (Brookfield, VT: Pickering & Chatto, 2012), 153-165.

[43] Javier Moscoso, "Exquisite and Lingering Pains: Facing Cancer in Early Modern Europe", in *Pain and Emotion in Modern History,* ed. Rob Boddice (London: Palgrave Macmillan, 2014), 16-35.

[44] Bettina Hitzer, "Oncomotions: Experience and Debates in West Germany and the United States after 1945", in *Science and Emotions After 1945: A Transatlantic Perspective,* ed. Frank Biess and Daniel M. Gross (Chicago and London: The University of Chicago Press, 2014), 157-178. The term "emotional regimes" was coined in William M. Reddy, *The Navigation of Feeling: A Framework for the History of Emotions* (Cambridge: Cambridge University Press), 2001.

thing, this synthetic review provides a background of scholarly evidence supporting the claim that experiences of illness can – and should – be considered as a proper space of existence of cancer, both historically and in the present. For another, it aims at suggesting that the experience of cancer from one perspective – for instance, of the people who received a medical diagnosis – cannot be fully accounted for without taking other points of view into consideration. If, as stated, the significance of a disease is necessarily grounded in culture, the conditions of possibility for thinking, feeling, and behaving about a condition experienced in one's own flesh must also rely on what Burke – after Mikhail Bakhtin – called "polyphonic history"; that is, integrating the voices of a variety of actors from an equally plural, or interdisciplinary, perspective.[45]

Illness Experience

In order to present a case study in the cultural history of illness experience, the above-mentioned ontological claims have to stand on corresponding epistemological and methodological grounds. Whilst the former regards the very possibility of accessing and understanding the thoughts and feelings of others, the latter deals with this problem in relation to people who have long ceased to exist and did not necessarily leave any personal record of what they lived through. A widely shared comprehension of the term *experience,* as an inner and private psychological content, seems to preclude the feasibility of this study. In 2005, the US intellectual historian Martin Jay pointed to this common-sense view – both within and outside academia – in the introduction of his book *Songs of Experience: Modern American and European Variations on a Universal Theme.* As he stated:

[45] Peter Burke, "Cultural History as Polyphonic History", *Arbor: ciencia, pensamiento, cultura* 743 (2010): 479-486. This journal issue followed a two-day international conference on *Polyphonic History: A Seminar in Honour of Professor Peter Burke,* organised by the Spanish cultural historians Javier Moscoso, Manuel Lucena, and José Ramón Marcaida, and held at the Centre of Humanities and Social Sciences, CSIC, Madrid, in January 2008.

> [T]he word "experience" has often been used to gesture toward precisely that which exceeds concepts and even language itself. It is frequently employed as a marker for what is so ineffable and individual (or specific to a particular group) that it cannot be rendered in conventionally communicable terms to those who lack it. Although we may try to share or represent what we experience, the argument goes, only the subject really knows what he or she has experienced. Vicarious experience is not the real thing, which has to be directly undergone.[46]

This is tantamount to saying that an individual experience cannot be properly conveyed to others. At best, those people who recognise themselves as having gone through a same issue can reach some understanding of each other through a silent bond emerging from empathy.

In recent years, the Spanish scholars Fernando Broncano and Javier Moscoso have made significant efforts at tracing the foundations of this extended usage of the term *experience*. Furthermore, they have called attention to alternative epistemological positions that are of great relevance to the object of this thesis. Drawing on a common academic background in the philosophy of science, both have argued for the revival of *experience* as a central concern of the New Humanities by way of independent but convergent programmatic texts. Broncano's 2012 article "Humanismo ciborg. A favor de unas nuevas humanidades más allá de los límites disciplinares" ("Cyborg Humanism: In Favour of New Humanities Beyond Disciplinary Limits") is reflective of a long-term interest in the philosophy of agency and the role of technology in shaping human identity.[47] Moscoso's 2014 publication "Poétique, rhétorique et politique des émotions: le drame de l'expérience" ("Poetics, Rhetoric, and Politics of Emotions: the Drama of Experience") is in turn based on an extensive investigation into the cultural history of pain and emotions.[48]

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[46] Martin Jay, *Songs of Experience: Modern American and European Variations on a Universal Theme* (Berkeley, Los Angeles, London: University of California Press, 2005), 5-6.

[47] Fernando Broncano, "Humanismo ciborg. A favor de unas nuevas humanidades más allá de los límites disciplinares", *Revista Educación y Pedagogía* 62 (2012): 103-116.

[48] Javier Moscoso, "Poétique, rhétorique et politique des émotions: le drame de l'expérience", in *Le passé des émotions: d'une histoire à vif. Amérique Latine et Espagne,* coord. Luc Capdevila and Frédérique Langue (Rennes: Presses Universitaires de Rennes, 2014), 15-25. Besides this and other publications mentioned below, Moscoso's reading seminars for PhD students ascribed to his research group

Notwithstanding differences of approach, these two researchers agree in considering the private nature of experience as an idea linked to a number of characteristic dichotomies of modern Western thought – such as spirit/matter, mind/body, subject/object, inside/outside, and I/Other – in light of the problem of epistemic authority, or the sources of reliable knowledge. On the one hand, Broncano has produced a wide-ranging account of consecutive philosophical trends in his 2013 book *Sujetos en la niebla: Narrativas sobre la identidad* (*Subjects in the Fog: Narratives about Identity*).[49] On the other hand, Moscoso has provided insightful comments whilst engaging in discussion with seminal scholarly works in specific domains of enquiry. Notably, his 2012 book *Pain: A Cultural History* includes a critical review of Elaine Scarry's *The Body in Pain* that illustrates important aspects of the issue in question. As he notes:

> In a general sense, her understanding of pain was based on two problems belonging to the philosophy of mind in the second half of the twentieth century: first-person authority and the problem of other minds. In the first case, Scarry assumed the indubitable nature of painful experience for any person who suffers it. In the second, she symmetrically defended the difficulty of producing knowledge about the pain of others. In the first case, pain appeared as the greatest conviction, while in the second, it reflected the greatest of uncertainties.[50]

In broader terms, Moscoso's observations apply to any of the "contents of consciousness", and especially to those allegedly lacking "referential content"; that is, a correspondence with an external object.[51] As he himself has pointed out, this is also the case for emotions.[52]

HIST-EX have been useful for developing the theoretical understanding of *experience* presented in this thesis.

[49] Fernando Broncano, *Sujetos en la niebla: narrativas sobre la identidad* (Barcelona: Herder, 2013). As Broncano stressed, the historical tension underlying each dichotomy is "convergent, but not equivalent" (p.23). Needless to say, the matter at hand is complex. Enlarging upon its manifold subtleties exceeds the scope of this thesis.

[50] Javier Moscoso, *Pain: A Cultural History* (London: Palgrave Macmillan, 2012), 4. This book was originally published in Spanish under the title *Historia cultural del dolor* (Madrid: Taurus, 2011). However, the Spanish version does not include the mentioned review of Scarry's book. Moscoso also discussed this issue in his Book review of Esther Cohen, Leona Toker, Manuel Consoni, and Otniel E. Dror, eds., "Knowledge and Pain", *Social History of Medicine* 26(4) (2013): 803-804.

[51] Moscoso, *Pain,* 4.

[52] On the historical epistemology of emotions, see Javier Moscoso, "From the History of Emotions to the History of Experience: A Republican Sailor's Sketchbook in the Civil War", in *Engaging the Emotions in Spanish Culture and History (18th Century to the*

Departing from dualistic standpoints, the two scholars have proposed an integrative conceptual framework. Broncano defends an understanding of experience as "both an objective and a subjective process" and as "the personal and collective appropriation of reality".[53] In a similar vein, Moscoso characterises experience as "what is at once familiar and strange, one's own and another's, individual and collective".[54] Neither of them claims originality for this idea. On the contrary, they both acknowledge indebtedness to a tradition of thought that dates back to the late-nineteenth and early-twentieth century works of several representatives of *Lebensphilosophie* – or philosophy of life – like Friedrich Nietzsche, Georg Simmel, and Wilhelm Dilthey. Amongst these German philosophers, Dilthey paid the greatest attention to the notion of *experience*. Some of his elemental postulates, in connection with later views of the US pragmatist John Dewey and the Scottish anthropologist Victor Turner, offer grounds for undertaking a history of experience in general; and of chronic, life-disrupting illnesses in particular.

In his book *Der Aufbau der geschichtlichen Welt in den Geisteswissenschaften* (*The Formation of the Historical World in the Human Sciences*), first published in 1910, Dilthey already posited that *experience* was the proper object of investigation for these academic disciplines. In contrast to the natural sciences, whose goal was to provide positivistic explanations of the physical world, the human sciences – or sciences of the spirit – aimed at the hermeneutic understanding of the psychic manifestations of life. Whilst the former sciences were concerned with the universality of knowledge, the latter focused on the historicity of meaning.[55] In Dilthey's view, the conditions of possibility for experience were societally embedded; that is, dependent on the immersion of the self, from earliest childhood, in a "commonality of language", "beliefs",

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Present), ed. Luisa Elena Delgado, Pura Fernández, and Jo Labanyi (Nashville: Vanderbilt University Press, 2015), 176-191.

[53] Broncano, "Humanismo ciborg", 104.

[54] Moscoso, *Pain,* 2.

[55] Wilhelm Dilthey, *The Formation of the Historical World in the Human Sciences. Selected Works,* Vol.3, ed. Rudolph A. Makkreel and Frithjof Rodi (Princeton and Woodstock: Princeton University Press, 2002 [1910]), 100-142. See also Jay, *Songs of Experience*, 223-230. For an enlightening contextualisation of Dilthey's work within the field of historical epistemology, see Alberto Fragio, *De Davos a Cerisy-La-Salle: la epistemología histórica en el contexto europeo* (Editorial Académica Española, 2011).

"value judgements", "rules of the conduct", and "determinations about purposes and goods".[56] Hence, the progressive interiorisation of this outer realm of "objective spirit" – ultimately organised in spheres such as law, religion, science, art, and politics – formed the medium through which the understanding of both oneself and others took place.[57]

Besides recognising the public, or communicable, nature of the depths of the human mind, Dilthey also contended that a lived experience did not consist on the passive reception of a continual flow of "impressions" coming from the outer world – that is, on formless content – but on "a unit whose parts are connected by a common meaning".[58] In other words, having an experience involved a cognitive, emotional, and volitional process of selection and structuring of elements of the unceasing stream of life. Ultimately, an experience reached its completion as an isolable narrative sequence, which Dilthey designated alternatively as an "objectification of spirit" and as a "life-expression".[59] Amongst the most privileged forms of crystallisation of individual experience, the German philosopher included autobiographical writings as well as works of art. Each of these ego-documents can be conceived as presenting a unique synthesis of a journey of the self into the unknown, returning as a transformed being. This movement was suggested in the use of the German verb *erleben* for "experiencing", or "living through".[60]

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[56] Dilthey, *Formation of the Historical World,* 155, 163 and 229-230.
[57] Ibid., 229-230.
[58] Ibid., 107 and 254.
[59] Ibid., 108.
[60] Several commentators have pointed to Dilthey's overconfidence on individual intentionality, understood as the inherent capacity to make sense of the self as a cultural being. Interestingly, Jay contrasted Dilthey's assumption with Simmel's contemporary essay *On the Concept and Tragedy of Culture;* Jay, *Songs of Experience,* 232-233. According to Simmel, the tragedy of culture regarded the increasing "alienation" of "subjects" from the "objects" produced, in a context of industrial "division of labour", and of "superfluous knowledge … accumulating in many areas of scholarship and science"; Georg Simmel, "On the Concept and Tragedy of Culture", in *Simmel on Culture: Selected Writings,* ed. David Frisby and Mike Featherstone (London, Thousand Oaks, and New Delhi: SAGE Publications, 1997 [1911]), 55-74. Whilst the former issue was linked to Karl Marx's criticism of capitalist economy, the latter partly resulted from the education policy of the German nation-state in the aftermath of the Franco-Prussian War, as stressed by Nietzsche in his essay *On the Advantage and Disadvantage of History for Life,* trans. Ger., with an introduction, by Peter Preuss (Indianapolis and Cambridge: Hackett Publishing Company, 1980 [1874]), 23-27. These historically-informed observations can be seen in light of the

Dilthey's conceptualisation of *experience*, as presented so far, is recognizable in John Dewey's philosophy of art. In his book *Art as Experience,* first published in 1934, this US pragmatist shared the basic stance that experience, "[i]nstead of signifying being shut up with one's own private feelings and sensations … signifies active and alert commerce with the world"; and, even more, "at its height, it signifies complete interpenetration of self and [internalised] objects and events".[61] In addition, Dewey conceived the outcome of experiences as "histories, each with its own plot, its own inception and movement towards its close" in the form of a meaningful "object", or "expression".[62] Finally, he described the very process of experiencing as proceeding through three successive phases; namely, self-awareness of a *disruption* with the regular flow of life; internal *conflict*, involving "temporary alienation"; and *consummation*, or the recovery of balance, which was "never mere return to a prior state for it is enriched by the state of disparity and resistance through which [the self] has successfully passed".[63]

The research on the etymology of the English word *experience* that the Scottish anthropologist Victor W. Turner conducted in the early 1980s was consonant with the views of the two philosophers, to whom he acknowledged a strong intellectual influence in his approach to the study of modern theatre. His last contribution to this issue, published posthumously, was evocatively titled "Dewey, Dilthey, and Drama: An Essay in the Anthropology of Experience".[64] Turner traced the incursion of the "I" into an unfamiliar domain back to "the Indo-European base **per-*, 'to attempt, venture, risk'" and "[t]he Germanic cognates of *per* relat[ing] experience to 'fare, fear, and ferry'". Furthermore, he connected the idea of a return of the subject to him or herself as a transformed being to "[t]he Greek peraō"; that is, "to traverse" – a verbal form

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problem of the "transparency" or "opacity" of the first-person authority, which is a unifying thread of Broncano's *Sujetos en la niebla*. This discussion is not central to the present thesis, but it deserves to be acknowledged.

[61] John Dewey, *Art as Experience* (New York: Perigee Books, 1980 [1934]), 19.

[62] Ibid., 35.

[63] Ibid., 14-15.

[64] Victor W. Turner, "Dewey, Dilthey, and Drama: An Essay in the Anthropology of Experience", in *The Anthropology of Experience,* ed. Victor W. Turner and Edward M. Bruner (Urbana and Chicago: University of Illinois Press, 1986), 35. As Turner stated, the findings presented in this book chapter summarised his more extended study *From Ritual to Theatre: The Human Seriousness of Play,* originally published in 1982.

in which he found "implications of rites of passage".[65] As he detailed, the latter notion belonged to the early-twentieth-century Dutch ethnographer Arnold Van Gennep, who described three successive stages in this particular form of rite: separation, liminality, and reincorporation.[66]

Liminality, reframed as the intermediary phase of experience, received most attention from Turner, as it best captured its conflict dynamics, in between the two phases of *separation* and *reincorporation*. The Scottish anthropologist characterised this transitory phase as the entrance into a "no man's land"; that is, a symbolic space in which previous certainties have been dissolved and the self struggles to identify new landmarks and find a new footing.[67] As Turner developed, "[l]iminality can perhaps be described as a fructile chaos, a storehouse of possibilities, not a random assemblage but a striving after new forms and structures, a gestation process, a foetation of modes appropriate to postliminal existence".[68] In this endeavour, always tending to a unique and unrepeatable narrative resolution, the individual could nonetheless be conceived as venturing – either consciously or not – into a myriad of footprints trails, which stood for the past experiences of those cultural fellows who tried to make sense of a same disrupting event; for instance, falling in love, moving to a foreign country, the demise of a close friend, or, as this thesis focuses on, a diagnosis of cancer.

In 1974, the French historians Jacques le Goff and Pierre Nora coordinated a programmatic book on the "new objects" of history. Amongst the many contributions to this issue, Jacques Revel and Jean-Pierre Peter co-authored a chapter titled "Le corps, l'homme malade et son histoire" ("The Body, the Sick Man and its History").[69] Despite its promising heading, their research ended with the impasse of conceiving severe or chronic illness as a private experience; that is, involving an internal state of pain and distress that could neither be

[65] Turner, *Dewey, Dilthey, and Drama*, 35.
[66] Ibid., 41.
[67] Ibid.
[68] Ibid., 42.
[69] Jacques Revel and Jean-Pierre Peter, "Le corps, l'homme malade et son histoire", in *Faire de l'histoire: nouveaux problèmes, nouvelles approches, nouveaux objets*, Vol.3: *Nouveaux objets*, coord. Jacques le Goff and Pierre Nora (Paris: Gallimard, 1974), 169-191.

doubted nor communicated. As Revel and Peter stated in their concluding remarks: "illness is an experience of the limit: a limit of identity (an other discovers himself in the same being), a limit of language (suffering inscribes death within life)".[70] From their epistemological standpoint, no history of illness experience was viable. A conceptual change can nevertheless be brought about with the replacement of the term *limit* for the notion of *liminality*, in the light of Turner's thought and its background on Dilthey and Dewey's philosophical approach to experience.

Following this alternative tradition of thought, the epistemological problem dissolves into a methodological issue. Once it becomes accepted that one cannot think, feel, and behave asides from societal commonalities (be it to agree with, reject, or re-signify them), the experience of illness of our forebears no longer appears to be as inherently inaccessible to our understanding. Even in the cases in which our sick ancestors did not produce any personal record of what they lived through, it is still possible to reconstruct – as far as historical evidence allows – the context of possibilities in which the understanding of the illness they went through was grounded. Furthermore, in the absence of this kind of roadmap of a foreign land (in a twofold sense, as past and liminal), the scarce number of surviving first-hand testimonies of illness of our long-term dead fellows would merely possess an anecdotic value. For only when roadmap legend becomes familiar, the singularity of an individual narrative of illness can be truly discerned.

In large part, this thesis approaches the experience of cancer illness during the second half of the nineteenth century through its cultural objectifications in the realms of science, religion, law, art, and the marketplace. As Roy Porter argued, a variety of sources – if "suitably interrogated" – can provide insights into the patients' views about their illnesses.[71] In line with this suggestion, the consecutive chapters of this work explore traces of personal stories of cancer in medical treatises, clinical records, anatomical drawings, rules governing the administration of hospitals, Catholic iconography, parish

[70] Ibid., 187.
[71] Porter, "Patient's View", 183.

sermons, books of prayers, moralistic literature, statistical profiles of the population's health, advice handbooks, self-care manuals, advertisements of anti-cancer remedies, news published in the general press, and other miscellaneous documents. Ultimately, the thesis also turns to examining diaries, correspondence, testamentary dispositions, and other ego-documents so as to present a number of in-depth analyses of individual expressions of cancer, which took either a verbal or a visual narrative form.

Social Relevance

Even though this thesis focuses on historical experiences of people diagnosed with cancer, its ultimate aim is to use the past to engage with the present.[72] According to recent surveys, cancers stand as the most feared group of conditions in Western societies,[73] even though cardiovascular diseases are the greatest killer.[74] Whilst numbers undoubtedly matter, as neoplastic diseases are

[72] Beyond this thesis, consecutive HIST-EX research projects on the cultural history of emotions and well-being have been explicitly concerned with the "intellectual tension between social demand and academic requirements", as stressed in Javier Moscoso and Juan Manuel Zaragoza, "Historias del bienestar: desde la historia de las emociones a las políticas de la experiencia", *Cuadernos de historia contemporánea* 36 (2014): 80.

[73] In the US, see "Americans Rank Cancer As Nation's Worst Disease", Rassmussen Reports, Lifestyles, 6th March 2014, accessed 29th July 2017, http://www.rasmussenreports.com/public_content/lifestyle/general_lifestyle/march_2014/americans_rank_cancer_as_nation_s_worst_disease. In the UK, see "People fear cancer more than other serious illness", Cancer Research UK, Press Release, 15th August 2011, accessed 29th July 2017, http://www.cancerresearchuk.org/about-us/cancer-news/press-release/2011-08-15-people-fear-cancer-more-than-other-serious-illness. In Spain, see "Resumen ejecutivo. Oncobarómetro 2010", Asociación Española Contra el Cáncer, Observatorio del Cáncer, accessed 29th February 2017, https://www.aecc.es/Investigacion/observatoriodelcancer/Documents/Resumen_Ejecutivo_OncoBarometro.pdf

[74] In the EU, see European Heart Network and European Society of Cardiology, *European Cardiovascular Disease Statistics, 2012 Edition* (Brussels: European Heart Network; and Sophia Antipolis: The European Heart House, 2012), 14. In the US, for CVD mortality statistics in 2010, see American Heart Association, "Executive Summary: Heart Disease and Stroke Statistics – 2014 Update: A Report From the American Heart Association", *Circulation: Journal of the American Heart Association* 129 (2014): 403. For cancer mortality statistics in 2010 and the total numbers of deaths in the US in 2010, see Sheryl L. Murphy, Jiaquan Xu, and Kenneth D. Kochanek "Deaths: Final Data for 2010", *National Vital Statistics Reports* 61(4) (2013): 5. This is not to say that cardiovascular diseases are not widely feared as well. For a historical discussion on this issue, including several parallelisms with shifting perceptions about

still the second major cause of death, understanding and confronting contemporary dread of cancer also requires a qualitative approach. For example, a self-help book that a Spanish oncologist published in 2010 showed that learning about their condition decreases the anxiety of oncologic patients.[75] Admittedly, this statement illustrates a controversial normative approach to illness experience, which collides with positions encouraging expressions of fear and grief. Consequently, it might not apply to all people with cancer.[76] Still, for those who experience relief in learning about cancer from the oral and written accounts of the clinicians, the therapeutic process may be prolonged and enhanced through an access to the findings of historical research.

Scholarly contributions to the history of cancer targeting a wide audience – beyond academic circles – have usually stressed the social relevance of their subject matter. Most often, their goal has been to situate the state of the art of oncologic research and cancer therapeutics in historical perspective, thus allowing the readers to elaborate an informed judgement about the scientific efforts directed at achieving total cancer control.[77] Great expectations are currently placed on the findings of molecular biology and its clinical applications. In the last two decades, the identification and mapping of oncogenes (or cancer-causing genes) and anti-oncogenes (or tumour suppressor genes)

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cancerous diseases, see David Jones, *Broken Hearts: The Tangled History of Cardiac Care* (Baltimore: John Hopkins University Press, 2013).

[75] Juan de la Haba Rodríguez, *Cómo vencer el cáncer. Una guía práctica, sustentada en casos reales, para entender la enfermedad, convivir con ella y superarla* (Cordova: Almuzara: 2010), Kindle edition, position 37/753.

[76] Hitzer, "Oncomotions", 169-170.

[77] See, for instance, June Goodfield, *Cancer Under Siege: A Unique Account of the Life and Ideas of the Scientists Who Are Striving to Lessen the Price We Pay for Life* (London: Hutchinson, 1975); Anton H. Blykowski, *The Discovery of Cancer Enigma* (London: Scientific Press, 1981); Daniel de Moulin, *A Short History of Breast Cancer* (Boston: Martinus Nijhoff, 1983); Joan Austoker, *A History of the Imperial Cancer Research Fund, 1902-1986* (Oxford, New York, and Tokyo: Oxford University Press, 1988); Adam Wishart, *One in Three. A Son's Journey Into the History and Science of Cancer* (London: Profile Books, 2006); James S. Olson, *Making Cancer History. Disease and Discovery at the University of Texas M.D. Anderson Cancer Centre* (Baltimore: The John Hopkins University Press, 2009); Jacques Rouëssé, *Une histoire du cancer du sein en Occident: enseignements et réflexions* (Paris: Springer, 2011); Robin Hesketh, *Betrayed by Nature. The War on Cancer* (New York: Palgrave Macmillan, 2012); Paul Marks and James Sterngold, *On the Cancer Frontier: One Man, One Disease, and a Medical Revolution* (New York: Public Affairs, 2014).

has resulted in the emergence of *targeted therapy*, that is, the design of laboratory drugs inhibiting the effects of a specific chromosome abnormality. For the time being, biotechnological innovation in this field remains limited to a few cancer-related mutations. Nevertheless, it also entails a huge conceptual change pointing towards a future of *personalised medicine* and the transformation of neoplasms into manageable chronic diseases, in similar terms as conditions like diabetes, hypertension, and arthrosis.[78]

Whilst this literature possesses the value of favouring the dissemination of hope in scientific progress in the domain of oncology, it does not systematically address the illness-side of cancer, involving the struggles and dilemmas that patients diagnosed with neoplastic lesions are currently confronting. In this regard, the use of history as a therapeutic tool presents a significant asset. On the one hand, past experiences of cancer illness are not our own. Hence, they can be looked at with the safety glasses of historical distance. On the other hand, a basic set of anthropological concerns persists across the centuries. Now and always, people diagnosed with cancer have had to adjust to a dysfunctional body, tried to make sense of the reasons for why they fell ill, and envisaged what they should do to regain their health, obtain a relief for their symptoms, or even prepare for an early death. This being said, we can somehow mirror ourselves in the historical experiences of cancer illness and even, through this indirect route, gain a critical perspective on contemporary cultural forms of living through cancer.

In large part, these considerations replicate those of the US cultural historian David Jones in the introduction to his 2013 book *Broken Hearts: The Tangled History of Cardiac Care.* As he stated:

> [This book] does not offer a systematic review of the current state of medical literature …. Nor is it an advice manual for patients and their families about making the right decisions …. Instead, my approach is historical …. It is often easier to subject the past to careful scrutiny than

[78] For a development of these issues, see Siddhartha Mukherjee*, The Emperor of All Maladies: A Biography of Cancer* (New York: Scribner, 2010), 405-463; Peter Keating and Alberto Cambrosio, *Cancer on Trial: Oncology as a New Style of Practice* (Chicago and London: The University of Chicago Press, 2012), 303-343; Thomas Tursz, *La nouvelle médecine du cancer: histoire et espoir* (Paris: Odile Jacob, 2013), 185-247.

> to do so with the present: the time has passed, and the stakes now seem lower. Distance from the past fosters both criticism and sympathy, a balance that can be hard to achieve in the present, when hearts and minds are at stake …. But strong continuities exist between past and present. Historical perspective can help open the present to thoughtful analysis and critique.[79]

Insofar as cancer has been intrinsically related to the notion of *malignancy* since Antiquity, the approach taken is valid for any subsequent historical period of Western civilisation. If this work focuses on the second half of the nineteenth century, it is because the decades examined present a particularly rich intertwining of both ancient and newly emerging representations of cancer, with the latter stemming from the scientific reconceptualisation of the group of conditions as malignant neoplasms. Presented in the form of a thesis, this research cannot expect to target a wide audience. Nonetheless, in line with other academic contributions to the medical humanities, it can hopefully point to the value of using historical research for providing an alternative therapeutic tool to the daily work of clinicians and the historical accounts of the scientists and practitioners who, throughout the centuries, have dedicated a part of their lives to the cure of cancer and the care of its patients.

Outline of Chapters

This thesis is divided in two parts. Part I, titled “On Cells and Skin”, focuses on medical and lay views on the pathogenesis, diagnostic signs, prognosis, and therapeutics of cancer. With some exceptions, the three chapters included in Part I do not directly address the thoughts, feelings, and behaviour of the people who received the diagnosis of a cancerous condition. Still, the issues considered provide significant insights for contextualising the conditions of possibility of their experiences of illness, both within and beyond the domain of doctor-patient interaction. To a large extent, Chapters 1 and 2 revisit *milestones*, or *landmarks*, in the intellectual history of cancer from Ancient Greece and Rome to the turn of the nineteenth century, with a strong emphasis on the preceding decades and the dissemination of the latest scientific ideas

[79] Jones, *Broken Hearts,* 23.

and technological innovations within the Spanish medical community. Chapter 3, in contrast, delves into the knowledge of cancer that the Spanish population at large could possibly possess during the second half of the nineteenth century.

In more detail, Chapter 1 reviews the changing criteria for the medical diagnosis of cancer in Western European history, from a specific cluster of signs at the surface of the body to the distinctive features of an abnormal cellular tissue. Asides from insisting on the changing nature of the biological processes that have been labelled as *cancer* across the centuries, this first incursion into the domain of intellectual history is significant for the object of this thesis in two different ways. Firstly, it allows tracing the semantic field of cancer-related terms that medical practitioners used at the bedside of their patients during the second half of the nineteenth century. This will be the basis for presenting, in the rest of the thesis, clinical cases of people who lived through a cancerous illness. Secondly, it provides necessary background knowledge for understanding how cancer patients became an increasingly larger collective during these decades all across Western Europe and, ultimately, an object of public health concern involving internationally coordinated initiatives.

Chapter 2 traces the emergence of the medical understanding of an operation as the sole means through which the cure of cancer could possibly be achieved. At a theoretical level, the issue regards a major shift in the representation of its pathogenesis, with direct consequences for its prognosis and therapeutics. From Antiquity to the mid-nineteenth century, cancer remained largely conceptualised as a blood dyscrasia; that is, as a systemic, and as such, incurable, condition. With the advent of the cellular theory of neoplastic formation, Western European practitioners began conceiving cancers as local diseases in origin, which were consequently curable through an early and thorough surgical procedure. In the last third of the nineteenth century, operability and curability became synonyms in cancer clinical therapeutics. At a practical level, the parallel processes of popularisation of chemical anaesthesia, antisepsis, and asepsis, favoured the possibility of performing

more exhaustive operations, in a wider number of anatomical seats (notably, in internal organs), and with greater chances of survival.

Chapter 3 moves on from the scientific representation of cancer to the popular understanding of malignant growths that circulated in Spain during the second half of the nineteenth century. At a time in which a majority of the population was illiterate and hardly anyone lived outside of Catholic instruction, the language of religion – deployed in oral, visual, and material forms – permeated all aspects of life, including illness. Moreover, there were a number of holy figures that were known as Patron Saints of cancer. Through their cult, Spanish churchgoers learned salient characteristics of the pathological condition. In addition, Catholic priests, along with moralising writers, regularly referred to moral vice as a cancer of the soul, and their descriptions of this symbolic disease were filled with medical semantics. Asides from the people who had a direct of mediated encounter with a first-hand experience of cancer, Catholic practice was possibly the most widespread means through which the Spanish population acquired some knowledge about its symptomatology, prognosis, and therapeutics.

Part II, titled “Illness Meanings”, deals specifically with the ways in which the people diagnosed with cancer could make sense of their illness. To this end, it explores a variety of ideas, emotions, and patterns of behaviour that were culturally available and repeatedly used for articulating this experience. Drawing on the theoretical grid that Arthur Kleinman proposed in *The Illness Narratives*, the research is structured around three different levels of *illness meaning*: Chapter 4 focuses on the interpretation of symptoms; Chapter 5 on that of the disease label; and Chapter 6 on the connections with emotionally-loaded past events and future prospects within an individual biography. As far as possible, a fourth level of signification is explored as a transversal issue. Each experience of cancer was the product of interpersonal negotiation, which often served an identifiable purpose (for instance, portraying the sick person as a hero, a sinner, or a victim of fate). In all cases, illness meanings lay at the intersection of the analytical categories of *body, mind,* and *culture*, which became blurred in practice.

In more detail, Chapter 4 approaches the ways in which Spaniards diagnosed with cancer lived with their symptoms, from the onset of illness to the end-of-life stage, and it does so in light of three general problems intrinsic to the experience of the sick body. A first issue concerns the very threshold of visibility of a symptom; that is, the subjective evaluation of a bodily alteration as evidence of a health problem. Clinical records of cancer patients consistently show that they initially mistook the earliest manifestations of their condition for minor and transient anomalies, whether anatomical or physiological. A second issue regards the threshold of severity of a cluster of symptoms, in connection to the perceived need of looking for medical assistance and as grounds for the acceptance or denial of having cancer. Finally, the third issue has to do with the cultural factors favouring the amplification or lowering of sick people's anxiety towards certain symptoms. During the period under analysis, this was notably the case of the medical, religious, institutional, and social responses to chronic pain and deep festering sores.

Chapter 5 focuses on the reactions to the knowledge of having cancer. At a time in which violent causes of death still decimated the Spanish population, most of the people who developed one form or another of malignancy were amongst those who managed to age, as statistical records show. Even so, accepting a diagnosis of cancer was not less burdensome. In many cases, two fundamental questions needed an answer; namely, *Why me?* and *What can I do, if anything, to regain my health?* With regard to the former, the medical uncertainty about the causes of malignant growths made room for a variety of culturally sanctioned ideas, whether mechanical, contagious, emotional, or moral in nature. With regard to the latter, an operation, whenever possible, remained a most dreaded procedure, which tended to be envisaged only as a last resort. Meanwhile, the medical marketplace offered a variety of alternative anti-cancer treatments – allegedly painless and infallible – to all those sick people determined to engage in a pathway of resistance to a most undesirable form of death.

Finally, Chapter 6 pays specific attention to the role that affective memories, self-image, and life-purposes played in the elaboration of a cancer narrative.

Instead of relying on a myriad of fragmentary expressions of illness in search of regularities, as in the two preceding chapters, the analysis concentrates on the (auto) biographical details of three distinguished cancer patients, with the ultimate goal of stressing the uniqueness of each individual illness experience. The first case study, which delves into the late years of the Spanish progressive politician Joaquín María López (1798-1855), best illustrates how a number of cultural objectifications presented all throughout this thesis intertwined with elements of a personal, family, and professional trajectory in a singular succession of events. The second and third case studies, in turn, move to Victorian England to examine the illness meanings conveyed through visual form in the respective last known portraits of Ada Lovelace (1815-52), celebrated today as the first computer programmer, and the diarist Alice James (1848-92).

PART I

ON CELLS AND SKIN

CHAPTER 1

MEDICAL DIAGNOSIS

I.1.1. *Karkinos,* the Crab

In the Ancient Greek mythology, *Karkinos* was a giant crab that fought for the nine-headed Hydra of Lerna in its battle against Heracles. When the crustacean clung on to the hero's foot, in an attempt to distract him from his target, Heracles crushed its shell to death.[1] Despite *Karkinos*'s failure to succeed, the goddess Hera decided to reward his service with a place of honour amongst the constellations, as one of the twelve signs of the zodiac.[2] Beyond the myth, in Classical Greece the term *karkinos* commonly designated a sea-crab, or a crayfish. The animal must have been quite familiar to the ancient Greeks, as it even appeared portrayed in some of their coins.[3] Within the Hippocratic corpus, it also became a disease label, along with *karkinoma*, with the suffix *-ωμα* indicating a process or an action. None of the surviving treatises of the corpus provide an explanation for the decision to name a pathological condition after the aquatic animal.[4] During the Roman Empire, however, a number of Greek physicians interpreted the Hippocratic choice in terms of analogies

[1] Apollodorus, *The Library of Greek Mythology,* trans. Gr. Robin Hard (Oxford: Oxford University Press, 1997), 74.
[2] Hyginus, *The Myths of Hyginus,* trans. Lat., and ed., Mary Grant (Lawrence, KS: University of Kansas Press, 1960), 213.
[3] For instance, it appears on one of the sides of the silver tetradrachm, used in the town of Acragas, as shown in De Moulin, *Short History of Breast Cancer*, 5.
[4] It may have been explained in the work *On Carcinosis,* but, unfortunately, this treatise was entirely lost; Spyros Retsas, "On the Antiquity of Cancer; from Hippocrates to Galen", in *Paleo-Oncology: the Antiquity of Cancer,* ed. Spyros Retsas (London: Farrand Press, 1986), 42.

between the symptomatology of the disease and the morphology and behaviour of the animal.

In the second century, Galen of Pergamum – who served as personal physician to the Roman emperors Marcus Aurelius, Commodus, and Septimius Severus – referred to the resemblance of the veins radiating from a cancerous tumour of the breast with the paws of a crab. As he wrote, in his treatise *A Method of Medicine to Glaucon*:

> We have often seen in the breast a tumour exactly like a crab. Just as that animal has feet on either sides of its body, so too in this affection [cancerous tumours], the veins of the unnatural swelling are stretched out on either side, creating a form similar to a crab.[5]

At around the same time, both Archigenes (1st – 2nd centuries) and Leonidas (2nd – 3rd centuries) linked the name of the disease with two other characteristic features of the animal: its consistency, as hard as the shell of the crustacean; and its intractable and rebellious behaviour, comparable to the obstinacy with which the crab clung onto a prey. Before these Greek physicians' works were lost, their shared thoughts were preserved in the treatise on gynaecology and obstetrics of Aetius of Amida, court practitioner to the emperor of Byzantium Justinian I. In the chapter titled "Concerning Cancer of the Breast, According to Archigenes and Leonidas", Aetius stated:

> The [old] physicians called the cancerous ulcer malignant and wild [bestial], a name derived from the crayfish, for these animals are rough and hard, and if they take hold [of an object] by their claws it can be removed only with extreme difficulty. Thus it stands out and resists touching and can be handled only with difficulty. A cancerous ulcer is called malicious, wicked and wild from the wild and vicious animals. It is an obstinate disease, defies treatment, and is aggravated by touching.[6]

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[5] Galen, "A Method of Medicine to Glaucon", in *On The Constitution of the Art of Medicine; The Art of Medicine; A Method of Medicine to Glaucon*, trans. Gr, and ed., Ian Johnston. Loeb Classical Library 523 (Cambridge, MA: Harvard University Press, 2016), 553.

[6] Aetius of Amida, *The Gynaecology and Obstetrics of the VIth Century, A.D.,* trans. Lat. (Cornarius, 1542), and ed., James V. Ricci (Philadelphia and Toronto: The Blackston Company, 1950), 49. Historians of cancer discussing the representation of cancer as a wild animal have generally referred to the Fourth Book of the Greek physician Paul of Aegina (7th century) as the earliest known source on the subject: "But some say that it is so called because it adheres to any part which it seizes upon in an obstinate manner"; Paul of Aegina, *The Seven Books of Paulus Aegineta,* Vol. 2,

Although the two interpretations differed, they were not mutually exclusive; both of them traced an analogy between a distinctive feature of the animal and a characteristic symptom of the disease, be it with its shape or with its consistency and course.

These comparisons persisted over the centuries. Moreover, new elements were introduced, as shown in the treatise on *Surgery* of Henri de Mondeville, published in 1312. Drawing on the works of fellow practitioners from present and past centuries, this professor of medicine at the Montpellier school and royal physician to the successive kings of France Philip the Fair and Louis X, commented:

> We have four reasons for calling these lesions 'cancers': a. The external ulcer often is round, an unusual shape for other ulcers. Here the shape is like the carapace of the marine animal we call cancer, which in France is called crab. b. It clings to where it lies. c. It is surrounded by many long and tortuous veins that suggest the appendages of a crab. d. It eats in any or all directions, a movement that suggests the sidling of a crab that can move forward or backward or to a side.[7]

By the late Middle Ages, the main characteristic signs of cancerous conditions – independently of their seat within in the body – could be divided into three different categories. In terms of shape, cancer consisted of a round and hard core, often surrounded by swollen veins. In terms of course, it progressively spread to adjacent parts of the body and showed resistance to therapeutics; or, even worse, any physical contact accelerated its growth. Finally, it was a particularly painful condition.

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trans. Gr., and ed., Francis Adams (London: Sydenham Society, 1866), 79. In his works, Paul of Aegina repeatedly referred to Archigenes and Leonidas.

[7] Henri de Mondeville, *The Surgery of Henri de Mondeville,* Vol. 2, trans. Fr. (trans. Lat. E. Nicaise, 1893) Leonard D. Rosenman (Philadelphia, PA: XLibris, 2004), 646. Fragmentary references to this quote can be found in Demaître, "Medieval Notions of Cancer", 623 and 625. More generally, this article has been extremely useful, firstly, to locate late medieval surgical treatises on cancer; and, secondly, for the clarity of its structure, as it deals in separate sections with the causes, pathogenesis, diagnosis, prognosis, and therapeutics of cancer. Unfortunately, this effort has been uncommon in the intellectual history of cancer. Most often, contributors have combined all these issues within broad chronologic sections, without clarifying the reasons underlying the selection of evidence.

These principle features of cancerous conditions applied indistinctively to tumours and ulcers, though physicians and surgeons did not always mention them all (or at least not with the same emphasis). Moreover, depending on whether the form was convex or concave, a number of additional characteristics were taken into account. A primary cancerous tumour often arose as a degeneration of a *scirrhus,* a distinct condition that was hard and could present swollen veins, but remained indolent.[8] A cancerous ulcer, whether primitive or subsequent to a malignant tumour, produced an ichor; that is, a watery discharge possessing a characteristic unpleasant smell. Added to this, it usually followed a more aggressive course.[9] The recurrence of these distinctions in medical treatises led a number of late-medieval physicians and surgeons to consider that the term *cancer* labelled two distinct diseases:[10]

[8] The term *scirrhus* was formed on the basis of the Ancient Greek root *σκίρρος* (pronounced *skiros*), which meant "hard". Outside of the medical realm, this word designated the gravel used to pave the roads, as well as dry, non-cultivated lands; Simón Martín, "El concepto de cáncer en el Corpus Hippocraticum", 11 (note 57). Galen can possibly be credited as the first to use the term *scirrhus* to designate a pre-cancerous lesion. It appeared in his treatise *On Tumours Against Nature,* as this work is generally referred to in English, A full translation into modern English was provided by Jeremiah Reedy in his article "Galen on Cancer and Related Diseases", *Clio Medica* 10(3) (1975): 229-238. Within the Hippocratic corpus (Galen's major intellectual reference), the treatise on the *Diseases of Women* contained a more generic reference to "hard tumours" of the breast degenerating into cancerous tumours, with the period of the transformation being signalled by the onset of pain: Hippocrates, "Des maladies des femmes", in *Oeuvres Complètes d'Hippocrate,* Vol.8, trans. Fr. Émile Littré (Paris, J-B. Baillière, 1853), Second Book, Section 133, 283.

[9] On the foul odour of the cancerous ulcer in Antiquity, see Hippocrates, "Prorrhétique", in *Oeuvres complètes d'Hippocrate,* Vol.9, trans. Gr. Émile Littré (Paris: J-B. Baillière, 1861), Second Book, Section 13, 37; Celsus, *On Medicine*, Vol. II, trans. Lat. W.G. Spencer, Loeb Classical Library 304 (Cambridge, MA: Harvard University Press, 1961), Book V, Section 26, 99-102; Aretaeus of Cappadocia, "On the Causes and Symptoms of Chronic Diseases", in *The Extant Works of Aretaeus, the Cappadocian,* trans. Gr., and ed., Francis Adams (Boston, MA: Milford House, 1972), 361; Aetius of Amida, "Concerning Cancer of the Uterus, According to Archigenes", in *Gynaecology and Obstetrics,* 101. In the early Middle Ages, see Paul of Aegina, *The Seven Books of Paulus Aegineta,* Vol.1, trans. Gr., and ed., Francis Adams (London: Sydenham Society, 1844), 627. In the late Middle Ages, see Lanfranchi of Milan, *The Surgery of Lanfranchi of Milan: a Modern English translation,* trans. ME (trans. Lat., 1380) Leonard D. Roseman (Philadelphia, PA: XLibris, 2003 [1296]), 68; Mondeville, *Surgery,* 645-646; Guy de Chauliac, *The Major Surgery of Guy de Chauliac,* trans. Fr. (trans. Lat. E. Nicaise, 1890), and ed., Leonard D. Rosenman (Philadelphia, PA: XLibris, 2005 [1363]), 373-374.

[10] Demaître, "Medieval Notions of Cancer", 612-613. Along with the works of Theodoric Borgogni, and Chauliac, mentioned by Demaître, see also Mondeville, *Surgery,* 636: "The two words of the term, 'Cancerous Ulcer' have different meanings. To know what

a *primary tumour,* exemplified by cancer of the woman's breast; and a *primary ulcer,* represented by cancer of the face or the legs.[11]

In this late-medieval process of distinction of two diseases, the cancerous ulcer, specially, gained a number of synonymous terms. Most often, it was referred to as *noli me tangere*, an advice with biblical resonance that meant it was better to leave the condition untouched.[12] It also received the name *lupus,* the Latin term for *wolf.* As a pathological condition, lupus was known as "the self-devourer", because it aggressively consumed the flesh.[13] Along the same line, the cancerous ulcer became synonymous to a formerly distinct condition; namely, *herpes esthiomenos* (from the Ancient Greek verbs *ἕρπειν*, *hérpein,* "to creep", and ἐσθίειν, *esthiein*, "to eat"), because of a similarity of course, including a common ability to penetrate the flesh, in contrast with other cutaneous conditions.[14] Finally, the cancerous ulcer and the gangrenous member were indistinguishable conditions in the absence of contextual details, due to the use of the Latin term *cancrena* to name them both.[15]

Overall, the way in which late medieval surgeons used these different terms to name a same pathological growth attests to the historicity of the meaning associated to disease labels. Depending on the case that was examined, the cluster of signs attributed to the disease named *cancerous ulcer* may well have corresponded to an autoimmune condition, a viral disease, or the result of an insufficiency of blood supply, as in the current scientific understanding of lupus, herpes, and gangrene, respectively. However, it may also have lacked correspondence with any of these biological processes, and even with a cellular pathogenesis, as present medical knowledge represents cancer. Throughout

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we deal with here we shall clearly indicate either a non-ulcerating cancer or a cancerous ulcer to avoid ambiguity".

[11] Theodoric Borgogni, *The Surgery of Theodoric,* Vol.2, trans. Lat. Eldridge Campbell and James Colton (New York: Appleton Century Crofts, 1960 [ca. 1267]), 25.

[12] Ibid., 32. See also Chauliac, *Major Surgery,* 373-374. The biblical reference appears in the New Testament, when, upon resurrecting and seeing Mary Magdalene for the first time, Jesus Christ stated *noli me tangere.*

[13] Borgogni, *Surgery,* 35 (quotation) and 25. See also: Milan, *Surgery,* 132; Chauliac, *Major Surgery,* 375.

[14] Borgogni, *Surgery,* 35; Mondeville, *Surgery,* 876.

[15] Rogerius, *The Chirurgia of Roger Frugard*, trans. It. (trans. Lat. Luigi Stroppiana and Dario Spallone, 1957) Leonard D. Rosenman (Philadelphia, PA: XLibris: 2002 [ca. 1180]), 61; Lanfranchi, *Surgery,* 189.

the centuries, the use of these different disease labels has been based on different medical criteria. As a result, the names of pathological conditions do not always match with, nor even include, the same biological processes.

Even if ancient and medieval medical writers often stressed that cancer – in any of its forms – occurred in many parts of the body, they only detailed its symptomatology in those places that could be seen and touched, such as the eyes, the nose, the breasts, the penis, the scrotum, the cervix, and the legs. For all practical purposes, cancer was an external disease. Human dissection and autopsy was a very limited practice, which accounted for the absence of descriptions of cancerous alterations of internal organs. With the exception of the early days of Alexandria, an abiding religious taboo prevented the manipulation of dead human bodies in Ancient Greece.[16] Under the Roman law, medical schools offered, at the most, the possibility of examining a skeleton or the corpse of a slave without dissection.[17] In this context, and in spite of acknowledging its limitations, the most regular practice consisted in the extrapolation of the knowledge that was obtained through the dissection and vivisection of animals, including mostly monkeys, but also pigs, cows, sheep, and goats.[18]

For most of the Middle Ages, knowledge of the anatomy of the human body rested mainly on the views inherited from medical authors of Ancient Greece and the Roman Empire, with Hippocrates and Galen standing as the greatest authorities, whose views were accepted as dogma, uncritically. In continental Europe, a slow revival of human dissection, including the practice of autopsy, started taking place in the thirteenth century, parallel in part to the flourishing of

[16] Vivian Nutton, *Ancient Medicine,* Second Edition (New York: Routledge, 2013 [2004]), 130-139. Following the conquest of Egypt, in 331 BC, Alexander the Great founded the city of Alexandria as a symbol of Greek power. Native Egyptians were subjected to Greek dominion, without access to Alexandrian citizenship. According to Nutton, this context of subjugation, along with the long-standing Egyptian practice of mummification, likely created an exceptional environment for three contemporary Greek physicians – Herophilus, Erasistratus, and Eudemus – who undertook a systematic exploration of the human body through the dissection of its internal parts. Later practitioners did not carry out such practices, even though they benefited from these works.
[17] Ibid.
[18] Ibid., 237.

medical universities (notably, in Bologna, Padua, Montpellier, and Paris). Progressively, public autopsies were established to train students of medicine, along with the publication of drawings of human anatomy. In addition, autopsies to determine the cause of suspicious deaths slowly began to be performed. An early case followed an order of Pope Innocent II, thus showing the relaxation of religious authority regarding the preservation of the integrity of human corpses.[19]

From the Renaissance onwards, the renewed vision of the internal anatomy of the human body in a condition of health – best represented by Andreas Vesalius' work *De humani corporis fabrica,* dating from 1543 – allowed to identify, by means of comparison, the alterations resulting from disease. In 1679, the Swiss physician Théophile Bonet published his *Sepulchretum, sive Anatomia practica,* a compilation of around 3,000 case histories of autopsies mainly performed by Western European fellows or by himself.[20] This work stands as an unparalleled record of the emergence of anatomical pathology over the course of the sixteenth and seventeenth centuries. The new discipline introduced a positive approach to the understanding of diseases. The purpose of an autopsy was to identify the anatomical lesion that was the immediate cause of the alterations observed at the surface of the patient's body. Insofar as patients often presented manifestations of more than one condition simultaneously, this was not an evident task. The accumulation of a series of cases over time, thus, was the way of finding the right correlation between a specific anatomic lesion and its corresponding diagnostic signs.[21]

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[19] Toby E. Huff, *The Rise of Early Modern Science: Islam, China, and the West,* Second Edition (New York: Cambridge University Press, 2003 [1993]), 195-197.

[20] Amongst them were renowned physicians and anatomists, like Paracelsus (1493-1541), Jean Fernel (1497-1558), Andreas Vesalius (1514-1564), Gabriele Falloppio (1523-1562), Eustachio (1524-1574), Francis Glisson (1597-1677), Rasmus Bartholin (1616-1680), Thomas Willis (1621-1675), Marcello Malpighi (1628-1694), Marcus Meibom (1626-1711), and Johann Conrad Peyer (1653-1712); Steven I. Hajdu, "A Note from History: The First Printed Case Reports of Cancer", *Cancer* 116(10) (2010): 2493.

[21] As the Italian anatomical pathologist Giovanni Battista Morgagni stated: "by this means [to] be able at once to conceive which of those symptoms are most frequently, more rarely, or never joined with any particular species of internal morbid constitution"; Giovanni Baptista Morgagni, *The Seats and Causes of Diseases, Investigated by Anatomy; containing a Great Variety of Dissections, and Accompanied with Remarks,* Vol.1, trans. Lat., and ed., William Cooke (London: Printed for Longman, Hurst, Rees, Orme, and Brown, 1822 [1761]), xviii-xix.

With the emergence of anatomical pathology, cases of internal cancers diagnosed retrospectively – through post-mortem examination of the body – began to be accumulated. These lesions were located in a variety of seats, such as the brain, the pharynx, the larynx, the lung, the liver, the pancreas, the stomach, the duodenum, the colon, the bladder, and the vagina.[22] In addition, the works of anatomical pathologists led to a redefinition of the medical notion of *tumour* that had been in use since Antiquity. Whilst the term *όγκος* (pronounced *onkos*) inherited from Galen included both tumours in the contemporary sense of the word and all sorts of lesions of an inflammatory nature, anatomical pathologists reserved it only for organic alterations persisting after the death of the patient.[23] For instance, in his *Surgical Observations,* published in 1804, the English surgeon John Abernethy explained this decision in the following terms: "I shall restrict the surgical signification of the word "Tumour" to such swellings as arise from some new production which made no part of the original composition of the body, and by this means I shall exclude all simple enlargements of bones, joints, glands, etc.".[24]

In the long-term, the sustained effort of anatomical pathologists to correlate anatomical lesions to clusters of signs was supposed to have an impact on

[22] As found in the two major works on anatomical pathology up to the turn of the eighteenth century. In Théophile Bonet, *Sepulchretum sive anatomia practica, ex cadaveribus morbo denatis, proponens historias et observations omnium humani corporis affectum, ipsorumq; causas reconditas revelans,* ed. by Jean Jacques Manget (Geneva: Cramer & Perachon, 1700), Vol.1: lung cancer ("Dyspnea & Stertor a cancro pulmonis partem superiorem obsidente; & arteriam asperam premente"), 486; in Vol.2: pancreatic cancer ("Vomitus a pancreate cancro affectio excitatus, Renes corrumpente"), 114; colon cancer ("A colo cancro affecto"), 233; cancer of the liver ("Ab Hepatis marasmo & cancrosa affectione"), 299; a second case of pancreatic cancer ("Lumborum & dorsi dolor a cancroso Pancreatis ulcere, Spina dorsi erosa & putrida"), 576; cancer of the bladder ("Ob Renes purulentes, carcinoma vesica"), 660; another case of cancer of the bladder ("Urina per anum ob vesica carcinoma rectum intestinum penetrans"), 678; in Vol.3: a third case of cancer of the bladder ("Ab utroque purulento cum carcinomate juxta vesicam"), 120-121; brain cancer ("Ob cerebrum cancro affectum"), 130. In Morgagni, *The Seats and Causes of Diseases,* Vol.1: pancreatic cancer, 244; lung cancer, 281; in Vol.2: cancer of the larynx and pharynx (two cases), 2-3; stomach cancer (two cases), 29-33; cancer of the duodenum, 88; cancer of the bladder and the vagina, 373.

[23] Galen developed this issue in his treatise "On Tumours Against Nature", as can be seen in Reedy, trans., "Galen on Cancer and Related Diseases", 227-238.

[24] John Abernethy, "An Attempt to form a classification of tumours according to their anatomical structure", in *Surgical Observations* (London: T.N. Longman and O. Rees, 1804), 6

medical practice in two ways: firstly, through the redefinition of the diagnostic features of each organic disease; and secondly, through the introduction of lesion-specific therapeutics. By the turn of the eighteenth century, however, this project was far from complete in the case of cancer. Furthermore, the condition was still largely defined in rather vague terms through the cluster of signs that formed the basis of the ancient and medieval analogies with the animal crab. As the Medical Committee of the British Society for Investigating the Nature and Cure of Cancer deplored, in 1806:

> It is very much to be wi[s]hed that we had an exact definition of cancer, those of the nosologists being very imperfect and insufficient. It has accordingly happened that a disease, which has been denominated cancer by one medical man, has not been allowed to be such by another …. We may be able to say something more satisfactory than that it seems to us to be cancer; or that it is cancer because it is an indurated, painful, and unequally enlarged gland, terminating in ulceration; or that every ulcer, in certain parts, which resists the common modes of treatment, or methods of practice, is to be regarded as cancerous. It is much to be wi[s]hed that we may no longer be deceived by ambiguous words and phrases, or consider them as conveying to us any essential or practical knowledge.[25]

This disease-specific society had been established in June 1801, under the initiative of Thomas Denman, a renowned English obstetrician. Insofar as a significant number of the fourteen members of the Medical Committee had been trained in the techniques of anatomical pathology, their collective view was particularly important. Most notably, Mathew Baillie, Everard Home, John Pearson, William Blizzard, and John Abernethy had been pupils of the leading Scottish anatomist and surgeon John Hunter, who had dissected hundreds of human specimens, both normal and pathological.[26]

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[25] Medical Committee of the Society for Investigating the Nature and Cure of Cancer, "Queries published by the Institution for Investigating the Nature and Cure of Cancer", *The Edinburgh Medical and Surgical Journal* VII (1806): 382-383. The specific reference to a "gland" was the only modern feature of the description, coming from the popularisation of the lymphatic theory of cancer. It was probably used here following the works of the Scottish surgeon John Hunter. A synthetic approach to the lymphatic theory of cancer will be provided in Chapter 2.

[26] The Royal College of Surgeons of England still preserves around 3,500 human and animal specimens and preparations of the Hunterian Collection, which can be visited in London.

In 1802, only a few months after the inauguration of the *Society,* its Medical Committee prepared a series of queries addressed to their fellows of the *Society for Bettering the Conditions and Increasing the Comforts of the Poor*, with the very first question being: "What are the diagnostic signs of cancer?".[27] In view of the scarce feedback that the questionnaire stimulated, it was reprinted four years later in *The Edinburgh Medical and Surgical Journal,* with each query accompanied by explanatory notes. It was in this second version that this group of distinguished medical professionals criticised the existing diagnostic signs of cancer for their equivocal character. At the time, their French counterparts were just beginning to redefine the object of the discipline of anatomical pathology. In the first third of the nineteenth century, the emergent focus on the histology of tumours boosted the production of original classifications of cancerous – or malignant – growths on the basis of their anatomical characteristics.

I.1.2. Histology

Between 1799 and 1802, the young French physiologist Xavier Bichat produced a series of medical treatises and oral lectures that reoriented the works of anatomical pathologists.[28] Having read both classic and contemporary medical treatises with dedication, and being experienced in the practice of autopsies, Bichat was able to posit that the elementary components of animal organisms were not the organs themselves, as earlier anatomists had generally

[27] Thomas Bernard, "Extract from an Account of the Institution for Investigating the Nature and Cure of Cancer", in Society for Bettering the Condition and Increasing the Comforts of the Poor, *Reports,* 1802, Vol.3 (London: Forgotten Books, 2013), 355-356.

[28] Bichat's works have often been mentioned within the literature on the intellectual history of cancer. See Michael Boris Shimkin, *Contrary to Nature: Being an Illustrated Commentary on Some Persons and Events of Historical Importance in the Development of Knowledge Concerning Cancer* (Washington: US Department of Health, Education and Welfare, 1977), 105; Rather, *Genesis of Cancer*, 52-56; Darmon, *Cellules folles*, 49-50; Rouëssé, *Histoire du cancer du sein,* 18; Steven I. Hajdu, "A Note from History: Landmarks in History of Cancer, Part 3", *Cancer* 118(4) (2012): 1157-1158. However, these scholars have usually discussed Bichat's works in broad terms, pointing to his role as a renovator of the discipline of anatomical pathology. For a detailed analysis of the ground breaking character of Bichat's ideas within the discipline of anatomical pathology, see Michel Foucault's classic work, *The Birth of the Clinic: An Archaeology of Medical Perception,* trans. Fr. A.M. Sheridan (London and New York: Routledge, 2012 [1963]), 152-213.

assumed, but a limited number of systems of membranes, or tissues, whose unique combinations formed each of the different organs.[29] During the series of lectures that he delivered at the *Hôtel-Dieu* in the academic course 1801-02, he identified up to nineteen different kinds of tissues: serous; mucous; cellular; pulmonary; glandular; cutaneous; muscular of the organic life; muscular of the animal life; arterial; venous; nervous; absorbent; fibrous; synovial; cartilaginous; medullar; of the bone system; of the pilous system; and epidermoid.[30]

With regard to anatomical pathology, two broad considerations ensued. Firstly, Bichat claimed that each disease was tissue-specific (for instance, an aphtha was a condition of the mucous membrane, whilst smallpox was an alteration of the cutaneous membrane). Secondly, he argued that diseases that resulted from anatomical lesions of the same kind of tissue always presented similar features. In this sense, they were "analogous" diseases; consequently, they had to be grouped together within a same class of pathological conditions.[31] The French physiologist nonetheless acknowledged two exceptions to these rules: inflammations and cancer. In both cases, the primary lesion was found in many different tissues.[32] In addition, whatever the tissue in which the cancerous

[29] Admittedly, earlier anatomical pathologies had considered diseases affecting specific parts of an organ (for instance, in *The Seats and Causes of Diseases,* Morgagni considered anatomical lesions of the arachnoid, the pleura, the pericardium, and the peritoneum). However, these parts were not considered to be simple portions of the elementary constituents of the organism.

[30] Xavier Bichat, *Pathological Anatomy, from an Autographic Manuscript of P.A. Béclard; with an Account of the Life and Labours of Bichat, by F.G. Boisseau*, trans. Fr. Joseph Togno (Philadelphia, PA: John Grigg, 1827 [1825]). In Bichat's consecutive works, the typology of membranes was slightly, but not substantially, revised. The previous versions of his original classification were published in Xavier Bichat, *A Treatise on the Membranes in General, and of Different Membranes in Particular,* trans. Fr. John G. Coffin (Boston, MA: Cummings ad Hilliard, 1813 [1799]); and Xavier Bichat, *General Anatomy, Applied to Physiology and Medicine,* trans. Fr. George Hayward, in three vols. (Boston: Richardson and Lord, 1822 [1801]). For the distinction between "organic life" and "animal life", see Bichat, *General Anatomy,* Vol.1, referring to "organic laws" and "vital laws" (9-21); and to "voluntary" and "involuntary" muscles (65-66).

[31] See notably Bichat, *General Anatomy,* Vol.1, 44-60. This way, Bichat departed from the mode of classification of diseases of earlier anatomical pathologists, who grouped medical conditions of a same organ (or cluster of organs) together, beginning with the head and ending with the lower extremities.

[32] Whilst Bichat acknowledged the nature of inflammations as a general disease in a separate introductory chapter of his *Pathological Anatomy* (chapter IV), his commentaries on the difficulties of the nosological classification of cancer were

lesion developed, it always ended up presenting a similar anatomical disorganisation. In other words, there was a lack of correspondence between the nature of the tissue and its cancerous alteration. [33]

When Bichat died at the premature age of thirty from tuberculosis meningitis, anatomical pathology nonetheless flourished under the lines that he had opened. It was the birth of histology; that is, the systematic description of an organism's tissues, both normal and pathological.[34] In the reconfiguration of the discipline along this new basis, cancer attracted an unprecedented level of medical attention. In 1812, the publication of the second volume of the *Dictionnaire des sciences médicales par une société de médecins et de chirurgiens* (known in English as the Panckoucke's *Dictionary of Medical Sciences*) provided a significant example of this.[35] The article on "Anatomical pathology" was addressed through the separate contributions of the physicians Gaspard Laurent Bayle and René Laennec, two long-term collaborators at the Parisian Hospital *La Charité*. Although using different approaches, both physicians put cancer at the forefront of the research within the discipline.[36]

On the one hand, Bayle produced an original text on the usefulness of anatomical pathology for medical practice that took cancer as a case in point for explaining a number of basic notions of the discipline. Significantly, he was also the joint author, along with Bruno Cayol, of the one-hundred-and-fifty-page

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scattered in different parts of the treatise. See, in particular, Bichat, *Pathological Anatomy,* 84-85 and 94-98.

[33] Ibid., 94-95.

[34] The neologism *histology*, formed through the combination of the Greek roots *histós*, "tissue", and logos, "study", was coined in 1819 by A.F.J.K. Mayer, a professor of the University of Bonn and enthusiastic follower of the works of Bichat, in an article titled "On Histology and a New Classification of the Tissues of the Human Body"; Leeland J. Rather, "Johannes Müller, Theodor Schwann, Matthias Schleiden, Jacob Henle, and the nature of plants and animal cells", in Rather et al, *Johannes Müller and the Nineteenth-Century Origins of Tumour Cell Theory*, 7.

[35] The Panckoucke's Dictionary of Medical Sciences (named as such after the its editor's surname) was designed as a sixty-volume compilation of the most up-to-date medical knowledge according to the most relevant French physicians, from the time of Napoleon's fall through to the early years of the Bourbon Restoration.

[36] René Laennec, "Anatomie pathologique", in *Dictionnaire des sciences médicales par une société de médecins et de chirurgiens,* Vol. 2 (AMU-BAN), coord. Adelon et al. (Paris: Panckoucke, 1812), 46-61; Gaspard Laurent Bayle, "Anatomie pathologique (Considérations générales sur le secours que l'anatomie pathologique peut fournir à la médecine)", in *Dictionnaire des sciences médicales,* Vol.2, 61-79.

article on “Cancer” of the Panckoucke, and he prepared a whole treatise on cancerous diseases that was published posthumously.[37] On the other hand, Laennec wrote an extended version of the “Note sur l’anatomie pathologique” (“Note on Anatomical Pathology”) that was already published several years earlier in the *Journal de médecine, chirurgie, pharmacie, etc.,* also known as the journal of Corvisart.[38] Whilst Bayle might be valued as a meticulous observer, who described cancer in a huge variety of organs using a broad framework of analysis, Laennec stood out for possessing a sharper conceptual mind, albeit working under a narrower focus. In the first decades of the nineteenth century, he was possibly the most influential contributor to the redefinition of the medical idea of cancer on a histological basis.[39]

This distinguished disciple of Bichat proposed a classification of diseases that, in contrast with the works of his mentor, located cancer in a well-demarcated taxonomic space. The condition was placed within the class of *accidental tissues,* a synonym for the term *tumour* that stressed the novelty of the pathologic production, which did not exist in a healthy body. Inflammations, in contrast, were viewed as simple enlargements of pre-existing normal tissues. In this regard, Laennec’s classification was no different to that of some of his contemporaries, asides from word choice. Drawing on this common ground, however, he introduced the idea that the new production could either be *analogous* in its nature to any of the systems of tissue existing in a state of health (as, for instance, in ossifications, formations of new fibrous or cartilaginous tissues, and cysts); or it could be *heterologous* and, as such, possess a distinct nature. With the exception of tubercles, the varieties of which

[37] See, respectively, Gaspard Laurent Bayle and Bruno Cayol, “Cancer”, in *Dictionnaire des sciences médicales,* Vol. 3 (BAN-CAN), coord. Adelon et al. (Paris: Panckoucke, 1812), 537-685; and Gaspard Laurent Bayle, *Traité des maladies cancéreuses,* ed. A.L.J. Bayle (Paris: M. Laurent, 1833).

[38] René Laennec, “Note sur l’anatomie pathologique”, *Journal de médecine, chirurgie, pharmacie, etc.* 9 (1805): 360-378. The journal article was previously read as a conference for the *Société de l’École de Médecine* during the winter of 1804-05.

[39] For a comprehensive review of the life and works of Laennec, including a particular focus on the invention of the stethoscope, see Jacalyn Duffin, *To See With a Better Eye: A Life of R. T. H. Laennec* (Princeton NJ: Princeton University Press, 1998).

formed the organic lesions of diseases like scrofula and phthisis, Laennec contended that only cancerous formations belonged to this genus.[40]

Placing cancer within the genus of heterologous tissues had two original implications. Firstly, it opened a new line of research for the unclear origins of its anatomical lesion. The common disorganisation of all the cancerous tissues – whatever the seat of the primary lesion – that Bichat observed in advanced stages of the disease was not the result of an internal process of degeneration of a pre-existing normal tissue. From its inception, Laennec argued, a cancerous formation possessed its own specific nature. Then, during its course, it progressively infiltrated other tissues, until their destruction and substitution. Secondly, Laennec grounded the historical distinction between benign and malignant tumours in the nature of the pathological tissue. Only heterologous tissues followed a life-threatening course. In contrast, analogous tissues were, in themselves, neutral, with the onset of disease depending solely on their excessive volume or their closeness to a vital organ.[41]

In addition, Laennec posited the existence of up to four distinct varieties of cancer. Along with the ancient *scirrhus* (conceived by then as a cancerous, instead of a *pre*-cancerous lesion), he introduced the terms *encephaloid*, *melanosis,* and *colloid* cancer. As varieties of a same pathological condition, all these cancerous formations shared a same malignant course: rather firm, or even hard, in their initial stage, they progressively softened until their near dissolution, which paralleled the onset of new formations either in the same or a distant seat. The differences that justified their distinct names belonged to the anatomical details of the cancerous tissue, in terms of its colour, consistency, texture, degree of opacity or transparency, and secretions in its different stages.[42] In the following years, many Western European practitioners produced their own original histological observations, with the common objective of achieving an exhaustive anatomical classification of varieties of cancer. Nevertheless, they expressed conflicting views.

[40] Laennec, “Anatomie pathologique”, 50-58.
[41] Ibid., 56-60.
[42] Ibid., 55-58.

One of the most enduring controversies involved the condition that Laennec termed as encephaloid cancer. In his treatise on *The Nature and Treatment of Cancer,* published in 1846, Walter Hayle Walshe, physician to University College London, pointed to the appearance of up to eleven synonyms for it over a twenty-five year span. Drawing mainly, though not exclusively, on works from his English and Scottish fellows, he mentioned the expressions *medullary sarcoma* (John Abernethy, 1804), *fungus haematodes* (James Wardrop, 1809), *milt-like tumour* (Alexander Monro III, 1811), *carcinoma spongiosum* (Thomas Young, 1813), *soft and spongy carcinoma* (Philibert Joseph Roux, 1814), *carcinus spongiosus* (Mason Good, 1817), *fungoid disease* (Astley Cooper, 1818), *medullary fungus* (Jean Pierre Maunoir, 1820), *acute fungous tumour* (Charles Bell, 1822), *galactomyces* (Ferdinand von Ritgen, 1828), and *cephaloma* (Robert Hooper, 1828).[43]

All these labels, Walshe stated, referred to a same anatomical object. In his words, "such diversity of *names* by no means implies a corresponding diversity of *things*".[44] However, the Irish physician failed to note that a number of the mentioned fellows had coined these alternative terms precisely to distinguish the tumours and ulcers they were describing from the pathological process they labelled as *cancer*. The essence of the problem was that there was no systematic correspondence between a same cluster of anatomical features and a same clinical course. On closer inspection, it was rather the case that a diversity of things had been subsumed under each name. For instance, the review of early-nineteenth-century uses of the term *fungus haematodes* that the French surgeon and anatomist Paul Broca included in the introduction of his *Traité des tumeurs* (*Treatise on Tumours*), issued in 1866, stressed that this disease label had been used to designate pathological growths showing clinical signs of malignancy as much as purely vascular formations (for instance, blood-filled cysts).[45]

[43] Walter Hayle Walshe, *The Nature and Treatment of Cancer* (London: Taylor and Walton, 1846), 10.
[44] Ibid., 9.
[45] Paul Broca, *Traité des tumeurs,* Vol.1 (Paris: P. Asselin, 1866), 19.

Overall, a widely shared agreement on the theoretical notion of *heterology* did not translate into a sound and consistent corpus of empirical observations revealing the distinctive features of the alleged varieties of cancer-specific tissue. In terms of medical practice, the clinical course of tumours and ulcers remained the only criteria, at the time, for achieving a non-controversial diagnosis of cancer. Ultimately, a pathological production was undoubtedly a cancer if it showed the characteristic signs of *malignancy* over the course of its development. For one thing, it had to spread to the surrounding tissues, until it occasioned the series of general disturbances in the organism known as *cachexia*, or the prelude of death. For another, it had to show a remarkable resistance to therapeutics. Whilst pharmacological remedies and caustic pastes often accelerated its course, a reproduction in a same or distant body part almost always followed its surgical excision. [46]

I.1.3. Under the Microscope

At the turn of the eighteenth century, Bichat had discarded the microscope as a useful tool for anatomo-pathological research. In his *Treatise on Membranes,* he judged the magnifying lenses of his time with criticism, on the grounds that the technology only served to produce subjective interpretations. As he stated, the "microscopic instruments [are] sorts of agents from which physiology and anatomy do not seem to me to have ever obtained a great assistance, as when we look into the darkness, each of us sees in his own way, and according as he is affected".[47] Over the course of the second third of the nineteenth century,

[46] Bayle and Cayol, "Cancer", 538-539.

[47] Xavier Bichat, *Traité des membranes en général et de diverses membranes en particulier* (Paris : Richard, Caille et Ravier, 1799, 32). The English translation of this work, previously referenced, was considered inaccurate in this particular passage (Bichat, *A Treatise on the Membranes in General,* 42). Therefore, an alternative translation has been proposed. Bichat's views on the microscope have already been mentioned in Foucault, *The Birth of the Clinic,* 205; and Ian Hacking, "Do We See Through a Microscope?", in *Representing and Intervening: Introductory Topics in the Philosophy of Natural Science* (New York: Cambridge University Press, 1983), 139. Each of these books provided a different though similar translation of part of the quotation. To clear up any doubt about the matter, Bichat's original words read as follows: "nos instruments microscopiques, espèce d'agents dont la physiologie et l'anatomie ne me paraissent pas d'ailleurs avoir jamais retiré un grand secours, parce

in the context of the perceived limitations of anatomical pathologists to reach an indisputable classification of benign and malignant accidental tissues, the development of more powerful optical instruments favoured the descent of histopathology to a microscopic scale.

In the early 1820s, the Royal Microscopical Society, based in London, was offering prizes for innovative projects in the technology of magnification of objects. The French optician Charles Louis Chevalier presented a successful model that eliminated chromatic aberrations, preventing the view of sharp images below a certain magnitude.[48] During the 1830s, other Western European opticians produced their own achromatic microscopes.[49] As this new technology was entering the market, Johannes Müller, a professor of anatomy and physiology at the Humboldt University of Berlin, was concerned with the "chief problem of the anatomy of tumours"; namely, the distinction between benign and malignant, or cancerous, growths.[50] In search of a new criterion to produce a stable classification of accidental tissues, he turned to the observation of histological cross-sections under the microscope.

In contrast to Bichat's views, Müller did not look through his achromatic microscope in complete ignorance. As he stressed in his 1838 article "Über den feineren Bau und die Formen der krankhaften Geschwülste" ("On the Finer Structure and the Forms of Morbid Tumours"), his knowledge drew largely from the work of his laboratory colleagues Matthias Schleiden and Theodor Schwann. Schleiden and Schwann had studied the cellular origin of macroscopic tissues and the principles for the development of the cells in plants

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que quand on regarde dans l'obscurité, chacun voit à sa manière, et suivant qu'il est affecté".

[48] Laura Otis, *Müller's Lab: Müller's Lab: The Story of Jakob Henle, Theodor Schwann, Emil du Bois-Raymond, Hermann von Helmholtz, Rudolf Virchow, Robert Remak, Ernst Haeckel, and Their Brilliant, Tormented Advisor* (Oxford: Oxford University Press, 2007), 57; Shimkin, *Contrary to Nature*, 127.

[49] For instance, Georg Oberhauser, in Paris, Simon Plössl, in Vienna, and Philip Heinrich Pistor and F.W. Schieck, in Berlin; Otis, *Müller's Lab,* 57-58.

[50] Johannes Müller, "On the Finer Structure and the Forms of Morbid Tumours", in Rather et al,, *Johannes Müller and the Nineteenth-Century Origins of Tumour Cell Theory*, 68.

and animals, respectively.[51] Their findings helped guide his empirical observations of a series of specimens classified as malignant tumours that were preserved in German and British museums of anatomical pathology. On this basis, Müller was able to identify six distinct features within the specimens: *cells*, which he considered "by far the most common element of tumours"; their nucleus, or *nuclei*, conceived as "germs of young cells"; *granules*, distinct from cells because of the impossibility to distinguish an internal cavity; *fibres*; *veins;* and *capillaries*.[52]

Whilst Müller supported Laennec's idea of the existence of cancer-specific tissues at a macroscopic scale, his microscopic observations led him to suggest that the idea was not translatable to the scale of cellular tissues. As he stated, "[t]he positive features of the structure of carcinoma show nothing that is at all heterologous or that is foreign to normal organisation; the formal elements are partly such as are found in the normal adult organism, partly such as are found in the primitive foetal state of the tissues".[53] In addition, the anatomo-pathologist described up to six different varieties of cancerous cellular tissue. However, he conceded that this classification was imperfect. For one thing, Müller had found tumours with a same microscopic appearance that nonetheless followed extremely varied courses. For another, he had also encountered cases of malignant formations that presented more than one variety of cellular tissue at the same time.[54] As he concluded, further investigation was needed.

In the following decades, an increasing number of anatomical pathologists engaged with Müller's new line of inquiry and produced their own original microscopic observations.[55] As the intellectual historian Leeland J. Rather

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[51] Ibid., 60 and 66. On the history of the scientific notion of the *cell*, see Rather, "Johannes Müller, Theodor Schwann, Matthias Schleiden, Jacob Henle and the Nature of Plants and Animal Cells", 3-7; and also Rather, *Genesis of Cancer*, 47-58.
[52] Müller, "On the Finer Structure and the Forms of Morbid Tumours", 63-64.
[53] Ibid., 71.
[54] Ibid., 69.
[55] The fast spread of Müller's writings to other Western European countries favoured this process. In two years, his work was translated to English by Charles West, under the title *On the Nature and Structural Characteristics of Cancer, and of Morbid Growths Which May Be Confounded With It* (London: Sherwood, Gilbert and Piper, 1840). In addition, Müller's ideas arrived to France through an extensive review by Louis Mandl

showed in his book *The Genesis of Cancer: A Study in the History of Ideas*, their contributions to the medical theory of malignant growths took two different directions.[56] A number of microscopists concentrated on a narrower object of investigation, positing the existence of a particular element within the cancerous cellular tissue, the *cancer cell,* and claiming that it stood as the characteristic sign of malignancy.[57] Meanwhile, other researchers adopted a broader perspective. Instead of focusing on the static description of a single element of the cellular tissue, they approached it as a whole and engaged with it dynamically by studying its successive developmental phases.[58]

In 1843, the Danish pathologist Adolph Hannover was the first to discuss the existence of a specific "*cellula cancrosa".*[59] According to his observations, such a cell possessed a round or oval form, with a variable diameter; it contained one or more large nuclei, was semi-opaque, and showed a grainy surface.[60] A conglomerate of cancer-cells formed a tumour with the characteristic signs of malignancy: that is, a progressive spread to adjacent tissues; a systematic reproduction after a surgical excision; and, ultimately, a general disorganisation of the organism, or cancerous *cachexia*. To distinguish "true cancer" from other pathological species showing a similar clinical course in spite of the absence of the cancer-specific cell, Hannover proposed the term *epithelioma*, which he identified with the condition that dermatologists termed as *cancroid.* In 1852, he elaborated this idea further in his successful treatise *Das Epithelioma, eine Eigentümliche Geschwulst, die man im allgemeinen Bisher als Krebs angesehen hat* (*The Epithelioma, a Strange Tumour, Which Has Hitherto Been Generally Regarded as Cancer*).[61]

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titled "De la structure intime des tumeurs ou des productions pathologiques", *Archives générales de médecine* 8 (1840): 313-329.

[56] Even if this book was published in 1978, and its approach as an internal history of ideas gives it a narrower scope, it remains unparalleled in terms of the detail and rigour in the presentation of the evidence.

[57] Rather, *Genesis of Cancer,* 108-117.

[58] Ibid., 118-155.

[59] Adolph Hannover, "Bericht über die Leistungen in der skandinavischen Literatur im Gebiete der Anatomie und Physiologie in den Jahren 1841-1843", *Arch. Anat. Phys. Wiss. Med.,* 1844, 18-19. Quoted in Rather, *Genesis of Cancer,* 109.

[60] Rather, *Genesis of Cancer,* 109.

[61] Ibid., 111-116.

Histo-pathologists received the idea of the existence of a *cellula cancrosa* with great enthusiasm. Two decades after its formulation, Thomas Weeden Cooke, physician to the London Cancer Hospital, still remembered that, "[w]hen a cancer cell was first announced, it was proclaimed from all the chairs as the one thing needful for diagnosis. Ecce signum!".[62] However, this initial triumph was followed by years of distrust in the Danish pathologist's findings. For one thing, the alleged cancer-specific cell was regularly found in healthy tissues. For another, records of malignant tumour cases that did not present such a cell were being registered.[63] After the downfall of the *cellula cancrosa,* a number of physicians proposed alternative versions of the cancer-specific cell. According to the Prussian surgeon Georg Albert Lücke in his treatise *Die Lehre von den Geschwülsten in anatomischer und klinischer Beziehung* (*The Study of Tumours in Their Anatomical and Clinical Relations)*, by the year 1869 there were up to fourteen different representations of the cancer cell, at least **(Figure 1.1)**.

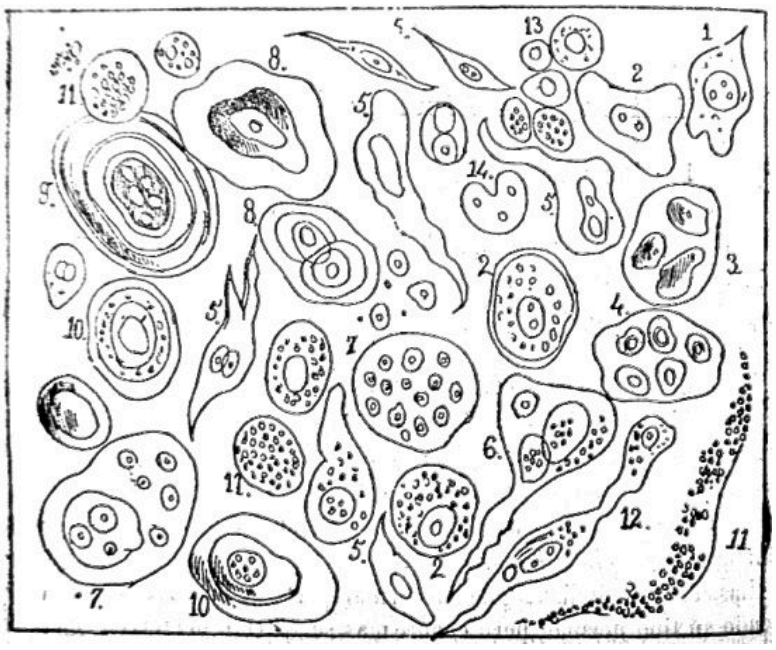

Figure 1.1 Georg Albert Lücke, Different forms of cells that carcinoma can present, 1869. Drawing extracted from Georg Albert Lücke, *Compendio de oncología, o tratado de los tumores bajo el doble punto de vista de la anatomía y de la clínica,* Vol. 2, trans. Ger., and ed., Salvador Badía y Andreu and Juan Giné y Partagás (Madrid: Carlos Bailly-Baillière, 1874), 122.

[62] Thomas Weeden Cooke, *On Cancer: Its Allies and Counterfeits* (London: Longmans, Green, and Co., 1865), 4.
[63] Ibid., 4-5.

In parallel, other scientists oriented their research towards the histogenesis of tumours, or *oncogenesis*. The Prussian pathologist Rudolf Virchow, a former pupil of Johannes Müller, was the most influential contributor to this broader analysis. Between February and April of 1858, Virchow delivered a series of twenty lectures on cellular pathology at the University of Berlin, which were later transcribed and printed under the title *Die Cellularpathologie in ihrer Begründung auf physiologische und pathologische Gewebelehre* (*Cellular Pathology as Based upon Physiological and Pathological Histology*).[64] As a prolongation of this work, and on the basis of twenty years of experimental study, Virchow gave thirty lectures on the pathology of tumours during the academic year 1862-63. These lectures were published in three volumes between 1863 and 1867, with the two first volumes sharing the subtitle *Onkologie,* a neologism that Virchow introduced to designate the part of medicine dedicated to the study of tumours.[65]

In this extensive work, Virchow explicitly positioned himself against what he named the *doctrine of specific elements*; that is, the idea that each disease arose from a distinct type of cell, which possessed its own unique

[64] The treatise was nearly immediately translated into English, under the title *Cellular Pathology as based upon Physiological and Pathological Histology,* trans. Ger. Franck Chance (London: John Churchill, 1860); also into French, as *La pathologie cellulaire basée sur l'étude physiologique et pathologique des tissus,* trans. Ger. Paul Picard (Paris: J-B. Baillière, 1861); and, a few years later, into Spanish: *La patología celular fundada en el estudio fisiológico y patológico de los tejidos,* trans. Fr. (Paul Picard, 1861) by Juan Giné y Partagás and B. Robert (Madrid: Imprenta española, 1868).

[65] Rudolf Virchow, *Die krankhaften Geschwülste. Dreißig Vorlesungen, gehalten während des Wintersemesters 1862-1863 an der Universität zu Berlin*, Vol. 1: *Onkologie,* First part (Berlin: August Hirschwald editor, 1863); Vol. 2: *Onkologie,* Second part (Berlin: August Hirschwald editor, 1865); Vol. 3: *Strumen, Myome, Neurome, Angiome* (Berlin: August Hirschwald, 1867). Although Virchow did not openly claim that he had coined the term "oncology", it can be inferred from indirect evidence. Firstly, Paul Aronssohn, professor of medicine at the University of Strasbourg and French translator of the work – under the title *Pathologie des Tumeurs. Cours professé à l'Université de Berlin* (Paris; Germer Baillière, 1867-71) – preserved the German spelling *Onkologie*. Secondly, and more decisively, the renowned German surgeon Theodor Billroth attributed the introduction of the term to Virchow. As he stated: "The old Grecian term for tumour in general is *όγκος*, bend, bending, bulk, mass, etc.; hence, Virchow has termed the study of tumours 'Onkologie'"; Theodor Billroth, *General Surgical Pathology and Therapeutics, in fifty-one lectures,* trans. Ger. Charles E. Hackley (New York: D. Appleton and Company, 1879 [1863]), 602.

characteristics.[66] The idea, originally formulated by the Prussian physician and naturalist Hermann Lebert in his 1845 treatise *Physiologie Pathologique* (*Pathological Physiology*), was a generalisation of Hannover's notion of the *cellula cancrosa,* which Lebert renamed as "globules cancéreux" (*cancerous globules*).[67] In contrast, Virchow proposed a different theory, the *doctrine of continuous development*. Instead of searching for a specific element of the cellular tissue, the microscope user had to consider its structure as a whole, and examine it in its evolution, beginning with the "mother tissue" from which it originated. As Virchow stated, "[we] can only set the basis of a system of *Onkologie* by starting from the genesis of tumours and establishing, with as much certainty as possible, the anatomical history".[68]

Based on the principle *omnis cellula e cellula* (that is, all cells arise from pre-existing cells), Virchow described two successive stages in oncogenesis. Initially, a mother tissue produced new cells through the division of the nuclei of its own cells. Then, the "differentiation" of this new cellular tissue took place.[69] On these grounds, the Prussian pathologist proposed a new principle for the notions of homology and heterology and the corresponding benign or malignant course of tumours. In his view, homologous tumours were those in which a new pathological cellular tissue developed in a location in which this tissue was normally present. In other words, a homologous tumour was a "simple hypertrophy of normal tissue", also known as *hyperplasia*; as such, it followed a benign course. Heterologous tumours, in turn, were those in which the new pathological tissue developed in a location in which this cellular tissue was not

[66] Rudolf Virchow, *Pathologie des tumeurs. Cours professé à l'Université de Berlin,* Vol.1, trans. by Paul Aronssohn (Paris: Germer-Baillière, 1867), 26 and 93.
[67] Rather, *Genesis of Cancer,* 109. On the same basis as Laennec's distinction between homologous and heterologous tumours, but at the cellular scale, Lebert coined the notions of *homeomorph* and *heteromorph* tumours. In his words: "whilst the former [category] comprises those [conditions] possessing elements that are found in the organism in its normal state, the latter comprises those composed of elements of an entirely new formation". Heteromorph, or malignant, tumours only included cancers. Hermann Lebert, *Physiologie pathologique, ou recherches cliniques, expérimentales et microscopiques sur l'inflammation, la tuberculisation, les tumeurs, la formation du cal, etc.,* Vol.2 (Paris: J.-B. Baillière, 1845), 2.
[68] Virchow, *Pathologie des tumeurs,* Vol.1, 114.
[69] Ibid., 90.

present in the state of health. As might be expected, this was the basis of their malignancy.[70]

In contrast to earlier authors, Virchow did not consider benignity and malignancy as discrete properties, but as the extremes of a continuum. In this respect, he introduced the expression "scale of malignancy", and pointed to the fact that the less malignant conditions were so close to the less benign ones that the distinction between the two categories became blurred.[71] Malignancy was more pronounced in new cellular tissues presenting a higher deviation from the mother tissue, and also in those producing "liquid substances", especially when they were "rich in venous and lymphatic vessels", which transported the pathological cells to surrounding or distant parts of the body.[72] At the macroscopic scale, and in line with previous authors, malignancy remained a property of those tumours that progressively propagated to surrounding tissues, were subjected to local reproduction after an excision, and gave rise to generalisation through the formation of new tumours in distant seats.[73]

Virchow's ideas led to a new nomenclature for the family of *tumours*, also known as *new growths* and *accidental tissues*. From then on, they were recast as the family of *neoplasms*. Although histo-pathologists of the last decades of the nineteenth century admitted that any new classification was transitory, their attempts generally followed the three criteria that their Prussian colleague had established. Whilst Virchow did not coin the majority of the terms he used, he was responsible for introducing systematicity, and further subtlety, in the nomenclature of neoplasms. Firstly, the classification of each neoplasm depended on whether it followed a benign or malignant course, a division that was made based on Virchow's notions of homology and heterology. Secondly,

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[70] Ibid., 27-29.
[71] Ibid., 29. Virchow must have introduced this idea before the lectures on the pathology of tumours that he delivered during the academic year 1862-63, as the surgeon Theodor Billroth already mentions it, crediting his colleague, in his work on *The Classification, Diagnosis and Prognosis of Tumours, Briefly Delineated for Practitioners,* trans. Ger. G. Baumgarten (St. Louis, MO: George Knapp & Co., 1861), 6: "Virchow has, however, pointed out a new course in another direction in saying, that the malignity of tumours is a various one, and a certain scale must be adopted for it". The original text, in German, was published in 1859 in the *Deutsche Klinik*.
[72] Virchow, *Pathologie des tumeurs,* Vol.1, 122-123.
[73] Ibid., 55.

the genus of each neoplasm depended on the nature of the pathological cellular tissue – how close to or different from a normal tissue it was – with the addition of the suffix *-oma* **(Figure 1.2)**.

GENUS	TERM	MEANING	
	Coined by:	**Etymology: G = Greek L = Latin**	**In context (Neoplasm of…)**
Angioma	----------	Vessel (G)	Vascular or lymphatic tissue
Carcinoma	Hippocrates	Crab (G)	Atypical connective tissue (*) **(*) Since the late 1860s: atypical epithelial tissue.**
Chondroma	Johannes Müller (1838)	Cartilage (G)	Cartilaginous tissue
Fibroma	Aristide Verneuil (1856)	Fibre (L)	Fibrous tissue
Glioma	Rudolf Virchow	Glue (G)	Interstitial tissue in brain and spinal cord
Lymphoma	----------	Water (L)	Lymphoid tissue
Lipoma	Alexis Littré (1709)	Fat (G)	Adipose tissue
Melanoma	Robert Carswell (1838)	Black (G)	Pigmented tissue
Myoma	Rudolf Virchow	Muscle (G)	Muscular tissue
Myxoma	Rudolf Virchow	Mucus (G)	Mucous tissue
Neuroma	Louis Odier (1803)	Nerve (G)	Nervous tissue
Osteoma	Robert Hooper (1828)	Bone (G)	Osseous tissue
Psammoma	Rudolf Virchow	Sand (G)	Tissue with calcareous deposits
Sarcoma	(Attributed to) Galen	Flesh (G)	**Atypical connective tissue**

Figure 1.2 Some genera of neoplasms in the 1860s. Table elaborated by the thesis author with data from Rudolf Virchow, *Pathologie des tumeurs,* transl. Fr. Paul Aronssohn, 3 Vols. (Paris: Germer Baillière, 1867-71).[74]

[74] Virchow failed to complete the fourth volume of his *Pathology of Tumours,* devoted to neoplasms of the epithelial cellular tissue. Consequently, a number of terms also used in the period (such as *epithelioma, adenoma, papilloma,* and *cholesteatoma*) are not included in the table. On this issue, see Steven I. Hajdu, "A Note From History: Landmarks in History of Cancer, Part 4", *Cancer* 118(20) (2012): 4914.

Finally, the species within each genus were separated in accordance to the morphology of their cellular tissue, which could take different shapes. For instance, an epithelial neoplasm with predominantly flat microscopic elements was classified as a *pavement epithelioma*; an adenoma in which the cellular tissue resembled a bunch of grapes received the name of *acinar adenoma;* and a neuroma with unmyelinated nervous fibres was known as an *amyelinic neuroma*.[75] An early and perdurable revision of the nomenclature concerned the meaning of the term *carcinoma.* As Rather pointed out, the Brunswick histo-pathologist Wilhelm von Waldeyer-Hartz was deemed as the ultimate responsible for its redefinition, in the late 1860s, as the genus of neoplasms arising from atypical epithelial tissue.[76] Notwithstanding this and other ulterior changes, the three structuring criteria for the nomenclature of neoplasms that Virchow introduced still remain in use in the latest version of the International Classification of Diseases for Oncology (shortened as ICD-O-3.1), which stands as a neoplasm-specific complement of the ICD-10.[77]

With respect to continuities between historical and present scientific representations, it is also worth noting that the terms *cancer* and *carcinoma* – which had been considered synonyms since Antiquity – became differentiated in the aftermath of Virchow's works. Whilst *carcinoma* was preserved for a specific neoplastic genus, *cancer* began to designate the whole class of *malignant neoplasms*. Significantly, when the French physician Jacques Bertillon presented his *Classification of Causes of Death* to the International Statistical Institute meeting held in Chicago in 1893, he considered "cancer",

[75] Luis Comenge, *Oncología, o tratado elemental de los neoplasmas, con un prólogo del Dr. D. Aureliano Maestre de San Juan* (Madrid: Tipografía de Manuel G. Hernández, 1884), 24-26.
[76] Rather, *Genesis of Cancer*, 139-152.
[77] In more detail, the ICD-O-3.1, issued in 2011, codifies neoplasms according to their *topography*, or anatomical site, and their *morphology*, or histological characteristics. For instance, the code "C34.1 M8041/3" stands for a primary carcinoma of the upper lobe of the lung, formed of small oat-like epithelial cells, which are atypical and, as such, malignant. The World Health Organisation published the first version of the ICD-O in 1976 as a supplement to the second chapter of the ICD, because the latter did not – and still does not – include morphology codification; "International Classification of Diseases for Oncology, ICD-O-3 Online", World Health Organisation, accessed 29th July 2017, http://codes.iarc.fr/abouticdo.php

"malignant tumour", and "malignant neoplasm" as interchangeable terms.[78] In the following years, European and American governments adopted Bertillon's work as a standardised means for the comparison of mortality across countries. Since 1948, the World Health Organisation assumed the function of bringing the list up to date, via the successive versions of the ICD. Nowadays, its Fact Sheet on "Cancer" still defines it as "a generic term for a large group of diseases that can affect any part of the body", with the precision that "[o]ther terms used are malignant tumours and neoplasms".[79]

I.1.4. Framing the Cancer Patient

So far, this chapter has reviewed the changing criteria for the medical diagnosis of cancer from Ancient Greece and Rome to the late 1860s, with an emphasis on the ideas introduced after the turn of the eighteenth century. During these decades, Spanish practitioners did not direct much effort to redefine the scientific representation of cancer on a histological basis, whether it was macroscopic or microscopic. For the purposes of this thesis, their minor and rather ephemeral contributions are negligible. Above all, leading Spanish physicians and surgeons – who were also usually lecturers in faculties of medicine – followed, assimilated, and disseminated the new ideas that came from French and German experts. The minutes of the First Spanish Medical Conference, held in 1864, provides a good example of this. During the fourth session, dedicated to cancer, the different speakers repeatedly referred to Laennec's varieties of heterologous tissue, Müller's microscopic observations, the hypothesis of the cancer-specific cell, and Virchow's cellular pathology, but offered no introduction of significant ideas developed in Spain.[80]

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[78] American Public Health Association, *The Bertillon Classification of Causes of Death* (Lansing, MI: Robert Smith Pronting Co., 1899), 20. This work was originally published in French a year earlier, as Jacques Bertillon, *De la nomenclature des maladies (causes de décès – causes d'incapacité de travail) adoptée par le service de statistique de la ville de Paris* [extr. *Annuaire Statistique de la Ville de Paris pour l'année 1896*] (Paris: Imprimerie Municipale, 1898).

[79] "Cancer: Fact Sheet Nº297".

[80] *Actas de las sesiones del Congreso Médico Español celebrado en Madrid. Septiembre de 1864* (Madrid: Imprenta de José M. Ducazcal, 1865), 335-414.

For a thesis focusing principally on the experience of Spanish people who received a diagnosis of cancer during the second half of the nineteenth century, this incursion into the field of medical theory is relevant in two ways. First, and most significantly, it allows one to trace the semantic field of cancer-related terms that medical practitioners used at the bedside of their patients. This will be the basis for presenting, in the rest of the thesis, clinical cases of people who lived through a cancerous illness. Second, it provides necessary background knowledge for understanding how cancer patients became an increasingly larger collective during these decades all across Western Europe and, ultimately, an object of public health concern involving internationally coordinated initiatives.

To address the first issue, the analysis has to move on from medical theory to medical practice. In 1838, Müller argued that the use of magnifying lenses required specialised knowledge. As such, he disapproved resourcing to "methods of such subtlety" in clinical praxis.[81] At the same time, an achromatic microscope was still quite expensive. For instance, the Schieck model that Müller used cost around one hundred Prussian thalers, which was almost as much as the annual salary of his laboratory assistant, Theodor Schwann.[82] Despite these issues, two treatises published in the late 1840s on malignant tumours already pointed to the emergence of the histological cross-section as a useful tool of diagnosis.[83] In the following decades, the fast process of institutionalisation of histology in Western European faculties of medicine and their associated clinical hospitals favoured the dissemination of this procedure, although it remained unsystematic and of limited value. Up to the late-nineteenth century, the anatomo-clinical criteria of diagnosis were still widely in use at the bedside of the patient, and even prevalent, as the most common form of medical practice in Spain shows.

Until the popularisation of Listerian antisepsis in the early 1880s (an issue that will be examined in Chapter 2), Spanish practitioners only carried out a biopsy

[81] Müller, "On the Finer Structure and the Forms of Morbid Tumours", 58.
[82] Otis, *Müller's Lab,* 57-58.
[83] Carl Bruch, *Die Diagnosis der bösartigen Geschwülste* (Mainz, 1847) and John Hughes Bennett, *On Cancerous and Cancroid Growths,* (Edinburgh, 1849). Both texts are referenced in Rather, *Genesis of Cancer,* 111.

– that is, the removal of a sample of pathological tissue from a living organism for its examination under the microscope – if it did not involve a surgical incision. In other words, the procedure was restricted to external ulcers, either primary in nature, or secondary as a development of a subcutaneous tumour. Still, biopsies were often useless for cases of ulcerated tumours; by the time the anatomical lesion showed up on the surface of the skin, the disease already presented clearly recognisable signs of malignancy.[84] Later on, Spanish physicians and surgeons still expressed reservations towards the use of a histological trocar. For one thing, the puncture was considered to be an invasive procedure, which could lead to the acceleration of the course of a malignant condition. For another, the sample of cellular tissue extracted through the trocar-cannula was not necessarily representative of the composition of the neoplastic lesion in its entirety. Consequently, it could not be completely relied on to make a correct diagnosis.[85]

As pointed out above, until the turn of the nineteenth century, the benignity or malignancy of a neoplastic lesion – and the consequent decision on the convenience of subjecting a patient to an operation – rested on anatomo-clinical criteria of diagnosis. At the most, in those cases of suspected malignancy that ended up in the operation room, Spanish clinicians sent the excised pathological growth to the histology department to obtain a confirmation or refutation of their diagnostic judgement. Still, the procedure was neither systematic in hospital practice nor usual outside of its walls, especially, in rural environments. In short, these few insights reveal that innovations in medical theory were not immediately translated to medical practice. As a result, the semantic field of cancer-related terms that will allow tracing cases of patients in this thesis includes words like *carcinoma, epithelioma,* and *sarcoma,* but also *scirrhus, encephaloid, melanosis,* and *cancroid*, to name only the most commonly used.

[84] José González Olivares, "Clínica Quirúrgica de la Facultad de Medicina de Santiago", *Boletín de Medicina, Cirugía y Farmacia* 113 (27th February) (1853): 3.
[85] Juan Creus y Manso, *Apuntes de patología* quirúrgica (Madrid: Imprenta de Diego Pacheco y cia., 1881), 72-73.

With regard to the possible seats for a cancerous lesion, two considerations must be added. The first of these concerns the diagnostic term *leukaemia.* In 1845, both Rudolf Virchow and the Scottish physician John Hughes Bennett had independently described a deadly condition whose chief characteristic feature, in post-mortem examination, consisted, respectively, in the unusually elevated presence of "white blood" cells or in a "suppuration of blood". These observations belonged to the autopsies performed on two adult patients who had both been admitted in hospital with complaints of increasing fatigue and abdominal swelling. In 1847, Virchow renamed the condition as *leukäemie* ("white blood"). Five years later, Bennett proposed the alternative term *leucocythaemia* ("white cell blood").[86] Neither of them, however, conceived this condition as cancer of the blood. In 1888, the French physician Louis Bard was, in all likeliness, the first to propose this hypothesis during a weekly meeting held at the society of medical sciences of Lyon.[87] Nevertheless, it still took decades for the idea to become common medical knowledge.[88]

The second consideration pertains to registered cases of *lung cancer*. In his book *A History of Lung Cancer: the Recalcitrant Disease,* the German historian Carsten Timmermann argued that lung cancer was an under-diagnosed condition during the period under analysis. Furthermore, he even stated that, "[f]or much of the nineteenth century, the story of lung cancer might be best characterised as a footnote in the histories of respiratory illnesses".[89] In the realm of chest diseases, pneumonia, bronchitis, emphysema and, above all, phthisis (or pulmonary TB), dominated medical thought. Added to this, the only means for obtaining a reliable diagnosis of lung cancer was an autopsy and,

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[86] See C. G. Geary, "Historical Review: The Story of Chronic Myeloid Leukaemia", *British Journal of Haematology* 110 (2000): 2-4; and Gordon J. Piller, "Historical Review: Leukaemia – A Brief Historical Review from Ancient Times to 1950", *British Journal of Haematology* 112 (2001): 283-285.

[87] "Société des Sciences Médicales", *La Province Médicale, paraissant à Lyon,* Third Year, Vol.2 (Lyon: Imprimerie Générale Vitte et Perrussel, 1888), 92.

[88] A decade after its formulation, Bard commented that the great majority of physicians of his time, led by the renowned histo-pathologists Victor André Cornil and Louis-Antoine Ranvier, still regarded *leucocythaemia* as a condition of the lymphatic tissue that was unrelated to cancer; Louis Bard, *Précis d'anatomie pathologique,* Second Edition (Paris: Masson et Cie., Éditeurs, 1899), 99.

[89] Carsten Timmermann, *A History of Lung Cancer: The Recalcitrant Disease* (Basingstoke: Palgrave Macmillan, 2014), 12.

by the time the patient died, the condition had usually spread to other organs, thus leading a number of practitioners to conclude that cancer never developed primarily in the lung. Timmermann relied on evidence from the British, French, and German contexts to build his argument.[90] The scarcity of references to lung cancer encountered in Spanish contemporary medical literature – including clinical records –corroborates his findings.

Moving from the assessment of individual patients to their consideration as a collective, the historiography of cancer has often pointed to the sustained increase in cancer-related mortality rates over the course of the second half of the nineteenth century. Notably, in his book *Les cellules folles* (*The Crazy Cells*), the French historian Pierre Darmon reviewed a series of statistical data from the UK, Austria, Italy, Norway, and Prussia, which led him to assert that "[b]etween 1880 and 1900, the mortality from cancer per 100,000 people seems to have doubled in most of the countries" **(Figure 1.3)**.[91]

Number of deaths attributed to cancer per 100,000 people in different European countries, after René de Bovis, *Semaine médicale*, 1902, 10th September, p.297

	1880	1888	1900
United Kingdom	51	62	83
Austria	37	49	74
Italy	21	42	52
Norway	43	54	85
Prussia	26	41	57

Figure 1.3 Number of deaths attributed to cancer per 100,000 people in different European countries (1880-1900). Table extracted from Darmon, *Les cellules folles,* 177; trans. thesis author.

[90] Ibid, 11-33.
[91] Darmon, *Cellules folles,* 177.

By the turn of the nineteenth century, the numbers in Spain were relatively low in comparison, with around 40 cancer-related deaths per 100,000 people.[92] Still, a significant increase of registered cancer deaths was also noticeable in the decades leading up to it, at least in major cities. The first national aggregated data on cause-specific mortality rates were not produced until 1900. Nevertheless, the disaggregated numbers for each province capital can be contrasted with earlier local data that contemporary Spanish physicians extracted from municipal or parish records and compiled in books of medical topography, as the below examples show.[93]

In his *Topografía médica de Valencia* (*Medical Topography of Valencia*), Juan Bautista Peset y Vidal found 62 deaths attributed to cancerous conditions between 1856 and 1860, which amounted to an average of nine deaths per 100,000 people from Valencia.[94] Four decades later, the numbers had increased by more than five, with up to 48 cancer-related deaths per 100,000 Valencians.[95] Likewise, the data that Philip Hauser provided in his *Condiciones médico-topográficas de Sevilla* (*Medico-topographical Conditions of Seville*) for the seven-year-period 1870-76 show that, on average, 64 deaths per 100,000

[92] Ministerio de Instrucción Pública y Bellas Artes – Dirección General del Instituto Geográfico y Estadístico, *Movimiento anual de la población de España. Año de 1900. Primera parte. Nacimientos, matrimonios, y defunciones en general* (Madrid: Imprenta de la Dirección General del Instituto Geográfico y Estadístico, 1901), xiii; and Ministerio de Instrucción Pública y Bellas Artes – Dirección General del Instituto Geográfico y Estadístico, *Movimiento anual de la población de España. Año de 1900. Segunda parte. Defunciones clasificadas por edades y causas de mortalidad* (Madrid: Imprenta de la Dirección General del Instituto Geográfico y Estadístico, 1901), 368-369. In 1900, the Spanish population amounted to 18,248,020 people and the total number of deaths attributed to cancer was of 7,294 deaths. The exact ratio between the two numbers was of 39.97 cancer-related deaths per 100,000 Spanish people.

[93] For an extended review of Spanish contributions to the scientific subgenre of medical topographies during the second half of the nineteenth century, see Juan Casco Solís, "Las topografías médicas: Revisión y cronología", *Asclepio* 53(1) (2001): 231-237.

[94] Juan Bautista Peset y Vidal, *Topografía médica de Valencia y su zona, o apuntes para una medicina práctica valenciana* (Valencia: Imp. Ferrer, 1878), 187 and 737. The average population of the city of Valencia for the five-year-period 1856-60 was of 144,646 people. The exact ratio between the average annual number of cancer-related deaths and the total population was of 8.57 deaths per 100,000 Valencians.

[95] Hans Leyden, *Relación de las investigaciones sobre el cáncer en España. Hechas el 1º de septiembre de 1902, en unión del Directorio del Comité de Investigaciones sobre el Cáncer en Berlín* (Jena: Gustav Fischer, 1903), 10. In 1901, the population of the city of Valencia amounted to 203,958 people and the total number of deaths attributed to cancerous conditions was of 97 deaths. The exact ratio between the two numbers was of 47.58 cancer-related deaths per 100,000 Valencians.

Sevillians were registered as cancer deaths.[96] By the turn of the nineteenth century, the proportion was of 106 per 100,000 Sevillians.[97] With regard to Vitoria, a smaller capital of the Basque Country, the archival research that Félix Susaeta conducted reveals that the proportion of cancer-related deaths was of six per 100,000 people, on average, in the ten-year-period 1876-85.[98] Fifteen years later, it had risen to nine per 10,000.[99]

Following early-nineteenth-century commentators, historians of cancer have considered a number of complementary factors accounting for the substantial increase in cancer mortality rates all across Western Europe during the second half of the nineteenth century. Firstly, improvements in public and private hygiene, along with better nutrition, resulted in a significant rise in average life expectancy. Secondly, autopsy progressively became a regular practice, which affected the systematisation and professionalisation of the certification of causes of death.[100] Last, but not least, the scientific representation of cancer profoundly changed during these decades. As has been detailed in this chapter, the criteria for its post-operative and post-mortem diagnosis shifted from a cluster of anatomo-clinical signs to the characteristic features of a cellular tissue. When the term *cancer* became a synonym for a whole class of diseases

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[96] Philip M. Hauser, *Condiciones médico-topográficas de Sevilla acompañadas de un plano sanitario-demográfico y 70 cuadros estadísticos* (Seville: Establecimiento Tipográfico del Círculo Liberal, 1882), 220, 235 and 244-245. The average population of the city of Seville for the seven-year-period 1870-76 was of about 128,959 people. The average annual number of cancer related-deaths was of 82.3 deaths. The exact ratio between the two numbers was of 63.82 deaths per 100,000 Sevillians.

[97] Leyden, *Relación de las investigaciones sobre el cáncer en España*, 10. In 1901, the population of Seville amounted to 147,333 people and the total number of deaths attributed to cancerous conditions was of 156 deaths. The exact ratio between the two numbers was of 105.88 cancer-related deaths per 100,000 Sevillians.

[98] Félix Susaeta, *Apuntes para un estudio médico-topográfico de Vitoria y su distrito municipal* (Vitoria: Imp. La Ilustración, 1888), 34 and 110. The average population of the city of Vitoria for the ten-year-period 1876-85 was of about 17,997 people. The average annual number of cancer related-deaths was of 11 deaths. The exact ratio between the two numbers was of 6.11 deaths per 10,000 Vitorians.

[99] Leyden, *Relación de las investigaciones sobre el cáncer en España*, 10. In 1901, the population of Vitoria amounted to 30,410 people and the total number of deaths attributed to cancerous conditions was of 26 deaths. The exact ratio between the two numbers was of 8.55 cancer-related deaths per 10,000 Vitorians.

[100] Darmon, *Cellules folles,* 178; Didier Foucault, "Introduction – Le cancer, une maladie pas comme les autres sous le regard des historiens", in *Lutter contre le cancer (1740-1960),* coord. Didier Foucault (Toulouse: Privat, 2012), 17-19; Mukherjee, *Emperor of All Maladies,* 44-45; Rouëssé, *Histoire du cancer du sein,* xxiv-xxv; Timmermann, *History of Lung Cancer,* 30-31.

showing a common pathogenesis – namely, the proliferation of abnormal cells – it came to designate a different pathological process.

At the dawn of the twentieth century, Western European governments – increasingly involved in the coordination of initiatives regarding public health – began to consider cancer as a problem of national concern. An early proposal to keep records of it came from the German Committee for the Research on Cancer. In 1900, its members designed a model questionnaire addressed to all German practitioners who had a cancer patient under their care specifically on 15th October 1900. The questions were mostly aimed at assessing the socio-economic profile of the people with a cancerous condition (age, gender, civil state, place of residence, profession); the criteria of diagnosis; and the aetiology of malignant neoplasms, or the causes attributed to their appearance. Answered questionnaires had to be sent back to the Ministry of Culture for the statistical analysis of the data. Between 1902 and 1906, the German initiative was exported to the Netherlands, Spain, Portugal, Hungary, Sweden, Denmark, and Iceland, in an unprecedented movement towards the international unification of medical investigations.[101]

In Spain, the project arrived through the intermediation of Hans Leyden, ex-Ambassador of the German Empire in Madrid.[102] During the summer of 1902, the questionnaire was translated and reproduced in a number of general newspapers of national circulation.[103] Nearly three hundred practitioners filled it with the data of cancer patients under their treatment on 1st September 1902 (or, alternatively, on 1st October) and sent the information back to the Directorate-General for Health.[104] In his official report, Leyden highlighted that

[101] G. Wagner, "History of Cancer Registration", in *Cancer Registration: Principles and Methods,* ed. O.M. Jensen et al. (Lyon: International Agency for Cancer Research: 1991), 3.
[102] Leyden' initiative in the context of the intergovernmental "anti-cancer fight" has already been mentioned in Rosa María Medina Doménech, *¿Curar el cáncer? Los orígenes de la radioterapia española en el primer tercio del siglo XX* (Granada: Universidad de Granada, 1996), 34-35.
[103] See, amongst others, Ministerio de la Gobernación – Dirección General de Sanidad, "Circular sobre el cáncer", *Gaceta de Madrid*, 25th July, 1902: 384; "Investigaciones sobre el cáncer", *El Liberal*, 26th July, 1902: 2; "El cáncer", *El Día*, 26th July, 1902: 2-3; and "Investigaciones sobre el cáncer", *El Siglo Futuro*, 28th July, 1902: 2.
[104] Leyden, *Relación de las investigaciones sobre el cáncer en España*, 3-6.

about eighty per cent of the questionnaires they received came from rural physicians, and rarely included microscopic observations.[105] In all probability, this circumstance contributed to the relatively lower proportion of registered cancer-related deaths of Spaniards in comparison to their fellows from neighbouring countries. Still, under the international context of emergent awareness of the increasing incidence of cancer, the statistics drew notable attention: the Directorate-General for Health described it as "such a terrible and frequent disease", whilst the general press referred to it as a "great scientific and humanitarian problem".[106]

[105] Ibid., 8 and 12.
[106] Ibid., 3; "Investigaciones sobre el cáncer", *El Liberal,* 2; "Investigaciones sobre el cáncer", *El Siglo Futuro,* 2.

CHAPTER 2

SURGICAL CURE

I.2.1. The Death of "Prince Carcinoma"

The reconceptualisation of cancer as a cellular disorder did not only affect the number of registered cases of malignancy: it also had major consequences for disease prognosis and therapeutics. In 1888, the Catalonian surgeon Juan Giné y Partagás expounded on this issue in a medical novel titled *La familia de los Onkos* (*The Family of Onkos*).[1] The storyline followed Doctor Histógenes Micolini in his journey to the land of *-Oma* with the purpose of acquiring first-hand knowledge of its inhabitants, the *Dyscrasias* and the *Neoplasms*.[2] These pathological conditions were personified, with the speech, behaviour, and social status of each character in keeping with their prevalent medical understanding. A central part of the plot focused on a lawsuit over the "right of primogeniture", with the *Dyscrasias* and the *Neoplasms* opposed against each other.[3] This dispute stood as a fictional representation of the mid-nineteenth-century medical debate on the origins of malignant cells, which had direct

[1] Juan Giné y Partagás, *La familia de los Onkos, novela o fantasía humorística de carácter clínico, escrita para recreo, utilidad y ornato de profesores y escolares de la noble ciencia y provechoso arte de curar, por el Dr. Histógenes Micolini* (Barcelona: Establecimiento Tipográfico-Editorial La Academia, 1888). Although this text was as well researched as the most up-to-date scientific treatises, it was singular in its purpose of not only instructing other practitioners, but also entertaining them.

[2] The fictional name Histógenes Micolini derived from two major innovations in the medical theory of the preceding decades; namely, the histogenesis of tumours (as seen in Chapter 1) and the germ theory of disease (whose relation to cancer will be addressed in Chapter 5).

[3] Giné y Partagás, *Familia de los Onkos,* 81-116 and 154-163.

implications for cancer curability, ultimately symbolised in the novel by the death of Prince Carcinoma **(Figure 2.1).**

Figure 2.1 D.A. Castelucho, Prince Carcinoma dying of apoplexy, 1888. Drawing extracted from Giné y Partagás (auth.) and Castelucho (illustr.), *La familia de los Onkos,* 159.

Doctor Histógenes Micolini – who was a witness to the scene – had found the family of *Onkos* in the height of a confrontation over the right to be recognised as the primitive existence in a living organism upon his arrival to the land of -*Oma*. On one side, the group of the *Dyscrasias* included twelve partisan sisters named Cancerous, Sarcomatous, Lipomatous, Scrofulous, Arthritic, Rheumatic, Syphilitic, Tuberculous, Leprous, Pellagrous, Scorbutic, and Herpetic. On the other, the group of the *Neoplasms* was composed of an equal number of brothers: Prince Carcinoma; his twin brother, Epithelioma; Sarcoma; Fibroma; Chondroma; Osteoma; Psammoma; Glioma; Mixoma; Adenoma; Angioma; Neuroma; and Lymphoma.[4] By now, all the names of this latter group should sound familiar to the reader. Nevertheless, the personification of cancer both as a Cancerous Dyscrasia and as a Neoplastic Carcinoma reveals that the emergent cellular theory of tumours was not monolithic. The duplicity

[4] Ibid., 85-95 and 137.

will be better understood through a synthesis of the discussion between the two factions.

Herpetic had been the first to take the floor, as the spokesperson of the *Dyscrasias* sisters. Their forefather*,* she claimed, was the "temperament". Therefore, *Dyscrasias* were "hereditary" and "live[d] in the blood".[5] Whenever a *Neoplasm* appeared, a *Dyscrasia* had engendered it.[6] Moreover, it was the *systemic* nature of the *Dyscrasias* that accounted for the reproduction of malignant tumours in distant seats of the organism. Otherwise, surgeons of all times would have to take an inacceptable "charg[e] of unskillfulness".[7] On this basis, the sisters demanded their right of primogeniture and to be granted the title of *essential dyscrasias*. On behalf of the *Neoplasms*, Prince Carcinoma – whose malignancy determined his superior status – counter-argued that no empirical evidence backed the stance of disease existence before its local manifestation as a tumour or ulcer. As he phrased it: "[b]ut this *Dyscrasia* – what proof of life did she give before the appearance of the Neoplasm? She gave none".[8] Hence, it was more reasonable to sustain that *Neoplasms* engendered *Dyscrasias,* and to conceive the latter as general alterations of the organism, though devoid of any essential properties.

An adjournment followed the end of the speech of the Prince of *Neoplasms*, whose uncontrolled zeal culminated in an abundant capillary haemorrhage. Before this incident, he had framed the core of the dispute in simple terms; namely: "[w]hat is then, primitive, the local growth or the general state?".[9] Before revealing the verdict of the court case, and in order to fully grasp its scope and implications for medical practice, historical precisions on the notion of dyscrasia are needed. As the term was coined within the humoral theory of disease, it is necessary to trace the subject back, at least briefly, to Ancient Greece. General ideas on humoralism will be reviewed, though the analysis will focus on the case study of the cancerous dyscrasia. Chapter 1 touched on the representation of the diagnostic signs of cancer across the centuries. Now, the

[5] Ibid., 86.
[6] Ibid., 91.
[7] Ibid., 93.
[8] Ibid., 91
[9] Ibid.

argument moves on to the humoralist explanation of the origins of those signs – including its adaptations to the Modern understanding of human anatomy – with the goal of assessing the emergence of the medical understanding of an operation as the only legitimate means to cure cancer.

In the sixth and fifth centuries BC, pre-Socratic philosophers were concerned with the structure of the natural world. In his treatise *On Nature,* Empedocles of Agrigentum proposed that the cosmos was made of four elements, each with two associated properties: air, moist and hot; water, moist and cold; fire, dry and hot; and earth, dry and cold. As long as these elementary forces were in equilibrium, the cosmos remained in harmony. Conversely, the predominance of one element over the others could produce droughts, floods, fires or earthquakes.[10] In the fourth century BC, the physician Polybus of Cos introduced a parallelism between this theory on the structure of the natural world and the formation of the human body. In his treatise *On the Nature of Man,* included in the Hippocratic Corpus, he conceived the existence of four corporal fluids, named *humours*, with properties analogous to those of the cosmic elements. These were, respectively, blood, phlegm, yellow bile, and black bile. Providing that the humours were properly combined, both in quantity and quality, health was preserved. Their imbalance, or *dyscrasia,* was at the origins of disease.[11]

In the second century, Galen developed the Hippocratic theory of humours. In his view, these elementary fluids resulted from a two-stage process of "coction" of ingested food in the stomach and the liver, the later conceived as the organ from which the veins stemmed. Blood was a polysemic term, naming both a specific humour and the mixture of all of them together. Galen also posited that the natural balance of the humours was not equal in all individuals. There existed different inborn *krasis,* or *temperaments*, depending on the dominance of a pair of qualities along the axes hot-cold and dry-moist.

[10] Noga Arikha, *Passions and Tempers. A History of the Humours* (New York: Harper Collins Publishers, 2007), 3-5.
[11] Ibid., 6-8. See also Hippocrates, "Nature of Man", in *Hippocrates: Vol. IV. Nature of Man; Regimen in Health; Humours; Aphorisms; Regimen 1-3; Dreams; Heracleitus: On the Universe,* trans. Gr. W.H.S. Jones, Loeb Classical Library 150 (Cambridge, MA: Harvard University Press, 1931), 11-14 and 19-24.

Each specific dominance – giving rise to a *sanguine, phlegmatic, choleric,* or *melancholic* temperament – predisposed to developing one type or another of disease.[12] When a humour was in excess, the organism attempted its rejection through its natural disposal routes; that is, the pores of the skin or another orifice of the body.[13] Tumour formation resulted from a blockage of this surplus in its way of evacuation. An accumulation of "black bile without boiling" inside the flesh produced a cancerous dyscrasia. If the black bile was "acrid", it engendered a cancerous ulcer; if not, the abnormal growth took the shape of a cancerous lump.[14]

The Galenic humoral framework and, within it, the understanding of the pathogenesis of cancer, remained unchallenged until the Renaissance. At that time, the production of new empirical observations on the anatomy of the human body cast doubt on the dogmatic authority of the Ancient Greeks. According to the US oncologist Siddhartha Mukherjee, a supposedly paradigmatic change took place with the work of Vesalius, as "black bile – that glistening masterpiece of Galen's physiology – was nowhere to be found" in his writings. From this single fact, the author of the Pulitzer Prize winner book *The Emperor of All Maladies: A Biography of Cancer* concluded that Vesalius' investigations into normal anatomy "buried" humoralism.[15] However, this conclusion disregarded the rich research carried out by historians of cancer. These investigations show how the Galenic theory of disease-formation for cancer persisted throughout the Modern period under new forms of thought, including its adaptation to the Harveian model of the circulation of the blood and the Rudbeck-Bartholinus model of the lymphatic system.[16]

In overview, whilst the notion of the four humours progressively decayed, they were substituted for endogenous chemical agents that had a similar effect of

[12] Robert M. Stelmack and Anastasios Stalikas, "Galen and the Humour Theory of Temperament", *Personality and Individual Differences* 12(3) (1991): 259-260. See also Arikha, *Passions and Tempers,* 9-14. According to these scholars, the main treatises in which Galen refers to temperaments are *On Temperaments* and *On the Natural Faculties.*

[13] Galen, "On Black Bile", in *Galen on Food and Diet,* trans. Gr., and ed., Mark Grant (London and New York: Routledge, 2000), 24.

[14] Reedy, "Galen on Cancer and Related Diseases", 234 and 236.

[15] Mukherjee, *Emperor of All Maladies*, 53.

[16] Rather, *Genesis of Cancer,* 13-45; Darmon, *Cellules folles*, 32-40.

corrupting the blood, known as dyscrasia. The reformulation of the pathogenesis of cancer, specifically, relied on two convergent ideas of the seventeenth century; namely, iatrochemical explanations of pathophysiology, defined in terms of an imbalance of chemical agents; and the formulation of the modern theory of the lymphatic system, with the lymph standing as a by-product of the blood. On this basis, Early Modern physiologists considered that cancer occurred as a result of the stagnation of the lymph in a body part and its interaction with an internal chemical compound. This organic element varied greatly according to the different authors. It was a "cancerous ferment" for Georg Stahl,[17] a "cancerous yeast" in the works of Jean Adrien Helvetius,[18] the "acridity [of certain] chemical agents" in Bernard Peyrilhe's view,[19] "a sulphurous hepatic air" according to Adair Crawford;[20] and still others described it as an "alkaline mixed with a foetid oil" or a "nitrogen oxide".[21]

In light of this evidence, several intellectual historians have seen continuity, instead of rupture, with Hippocratic humoralism. Notably, Darmon pointed out: "the theory of lymphatic stagnation and corruption merely went back over and updated the ancient theory of humours, substituting the fusty black bile for a less mythic humour".[22] Previously, Rather had reached a similar conclusion. His research on the scientific representation of cancer during the Early Modern period led him to coin the term "iatrochemical humoralism".[23] Furthermore, this scholar distinguished a "third version of humoralism", beginning in the late-eighteenth century and lasting to the mid-nineteenth century.[24] Whilst these studies focused on the history of the idea of cancer, they were consonant with general research on the persistence of humoralism in medical thought.

[17] Mentioned in Rather, *Genesis of Cancer,* 35.
[18] Jean Adrien Helvétius, *Lettre de Mr. Helvétius, Docteur En Médecine, à Monsieur Régis sur la nature et la guérison du cancer* (Paris, Jean Cusson, 1691), 6. Quoted in Rouëssé, *Histoire du cancer du sein*, 13.
[19] Bernard Peyrilhe, *Dissertation académique sur le cancer* (Paris: Hansy et Didot, 1776), 10. Quoted in Rouëssé, *Histoire du cancer du sein,* 14.
[20] Adair Crawford, "Experiments and Observations on the Matter of Cancer, and on the Aerial Fluids Extricated from Animal Substances by Distillation and Putrefaction; Together with Some Remarks on Sulphureous Hepatic Air", *Philosophical Transactions of the Royal Society of London* 80 (1790): 391-426.
[21] Bayle and Cayol, "Cancer", 540.
[22] Darmon, *Cellules folles,* 36-37.
[23] Rather, *Genesis of Cancer,* 26-30.
[24] Ibid., 64-67.

For example, in the article on this topic included in the *Companion Encyclopaedia of the History of Medicine* edited by William Bynum and Roy Porter, the British historian Vivian Nutton traced vestiges of humoralism up until the second half of the nineteenth century.[25]

According to Rather, the third version of humoralism had its roots in the lymphatic theory of tumour formation. In the late-eighteenth century, the Scottish anatomist John Hunter introduced the term "coagulating lymph" to designate a bodily fluid that possessed the property of spontaneous organisation whenever it flowed out from the blood vessels. Just like the humours in classical theory, the coagulating lymph was the substance deemed responsible for the creation of both healthy and diseased body parts. As this eminent scientist wrote, blood – via the coagulating lymph – was the "material out of which the whole body is formed and out of which it is supported".[26] As might be expected, a number of diseases occurred when the coagulating lymph was under the influence of an endogenous poison, such as the *cancerous morbid poison*.[27] Hunter's ideas were greatly influential in the following decades. For example, in 1829, the French pathologist Jean Frédéric Lobstein asserted that heteroplastic (or heterologous) tumours resulted from the endogenous alteration of the "coagulable lymph".[28]

When histologists turned to the microscope in the search for a finer understanding of organic structures and processes, the idea that a fluid pre-existed and was at the origin of any solid life, beginning with the cells, was reformulated as the *blastema* theory of cytogenesis, with the Ancient Greek root of this term – *βλαστός*, pronounced *blastós* – meaning a germ, a bud, or a sprout. In 1839, Theodor Schwann described the role of the blastema clearly in his *Mikroskopische Untersuchungen über die Übereinstimmung in der*

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[25] Vivian Nutton, "Humoralism", in *Companion Encyclopaedia of the History of Medicine,* Vol.1, ed. William Bynum and Roy Porter (London: Routledge, 1993), 281-291.
[26] John Hunter, *Works,* Vol.1, 229-231. Quoted in Rather, *The Genesis of Cancer,* 42.
[27] John Hunter, *Lectures on the Principles of Surgery,* ed. James F. Palmer (Philadelphia, PA: Barrington and Haswell, 1839), 370-375.
[28] Jean Frédéric Lobstein, *Traité d'anatomie pathologique* Vol.1 (Paris: Levrault, 1829), 365 and 473. Quoted in Virchow, *Pathologie des tumeurs,* 19. See also Rather, *Genesis of Cancer,* 66-67.

Struktur und dem Wachstum der Tiere und Pflanzen (*Microscopical Researches into the Accordance in the Structure and Growth of Animals and Plants)*. As this Müller's laboratory assistant stated:

> There is present at first a structureless substance, which lies either within or between already present cells. Cells are formed within this substance … and these cells develop in manifold ways into the elementary parts of organisms.[29]

In 1845, the Bavarian pathologist Julius Vogel referred specifically to the "cytoblastema of cancer".[30] Moreover, in 1846, the Bohemian professor of anatomical pathology Karl Rokitansky argued that neoplasms contained a "native anomaly in the blastema", which was of a chemical nature. On this basis, he established a typology of blood dyscrasias.[31]

Now that the meaning of these terms has been clarified, it is time to go back to the lawsuit on the right of primogeniture opposing *Dyscrasias* and *Neoplasms.* Once recovered from his capillary haemorrhage, Prince Carcinoma joined Doctor Histógenes Micolini as his tourist guide in a walk through the land of -*Oma*. After crossing a ganglion bridge over the *Sanies* River and its tributary, the *Ichor,* the two characters visited a number of the territory's emblematic institutions, which were equally fashioned with both normal and pathological organic materials. As Micolini had expressed his interest in histological investigations, they eventually stopped at Rudolf Virchow's house, who received them courteously. Whilst the laboratory researcher was introducing the foreign doctor to his histological classification of the family of tumours, a messenger for the Queen of -*Oma* burst into the room, paid his respects to Carcinoma, and gave him a sealed envelope. The prince of *Neoplasms* received it with

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[29] Theodor Schwann, *Mikroskopische Untersuchungen über die Übereinstimmung in der Struktur und dem Wachstum der Tiere und Pflanzen* (Berlin, Sanders: 1839), 196. Quoted in Rather, *Genesis of Cancer,* 91.

[30] Julius Vogel, *The Pathological Anatomy of the Human Body,* trans. Ger. George E. Day (Philadelphia, PA: Lea & Blanchard, 1847 [1845]). Referenced in Rather, *Genesis of Cancer,* 98.

[31] Karl Rokitansky, *A Manual of Pathological Anatomy,* Vol.1, trans. Ger. William Edward Swaine (Philadelphia, PA: Lea & Blanchard, 1854 [1846]), 88-93. Quoted in Rather, *Genesis of Cancer,* 100.

unmasked emotion and read it silently – immediately after which, he suffocated and fell to the floor.[32] A "fulminant apoplexy", Virchow sentenced.[33]

Concerned with Micolini's bewilderment at the scene that had just taken place in front of him, he kindly explained:

> – *Carcinoma* is not dying of sorrow, but of an excess of joy: this document is the notification of the sovereign's verdict, which is favourable to *Neoplasms*. Read it; ignore the Findings of Fact and the Considerations of Law: read!
> "We rule that we have to rule, and we rule:
> 1. That any *Dyscrasia* has a local origin.
> 2. That Neoplasms are antecedent to *Dyscrasias;* and
> 3. That there are no essential *Dyscrasias.*" [34]

Of course, it was no coincidence that the death of Prince Carcinoma occurred in Virchow's studio. In the mid-nineteenth century, this eminent pathologist was deemed as the ultimate responsible for the theoretical shift in the idea of cancer causation from a circulating fluid (altered blood) to a solid (altered cells); or, in other words, from a primitively *systemic* disease to a primitively *local* disease. Prince Carcinoma may have died of joy for the triumph of *Neoplasms* over *Dyscrasias*; but his sudden death symbolised, above all, that cancer circumscribed to a set of cells, and was therefore curable if operated on at an early stage.

The shift in the representation of the pathology of cancer rested on Virchow's principle *omnis cellula a cellula*. Asides from the considerations made in Chapter 1, the statement that all cells emerged from existing cells stood in opposition to the theory that they formed freely within a blastema, whether normal or dyscrasic. With regard to the latter, Virchow asserted: "the proof of this primitive alteration is lacking".[35] The Prussian pathologist was cautious about generalising his alternative explanatory framework. Nevertheless, he had reversed the burden of proof. In light of his research findings, malignant tumours only showed in the blood in an advanced stage of the disease, through

[32] Giné y Partagás, *Familia de los Onkos,* 139-160.
[33] Ibid., 160.
[34] Ibid.
[35] Virchow, *Pathologie des tumeurs,* Vol.1, 42.

the progressive propagation of atypical cells via the lymphatic and vascular vessels. As he wrote:

> In a probably much larger number of cases, the alteration of the blood, the dyscrasia causing the eruption of new tumours … is not the result of any "spontaneous" action, occurring in the blood and producing, in an extraordinary manner, specific chemical substances; it rather results from the absorption, the introduction in the circulation of substances proceeding from a pre-existing tumour, from a nodule that doesn't need, in turn, to derive from the blood.[36] …. [D]irect observation shows that the accessory nodules originate in a proliferation of elements of surrounding tissues and not, as it was still admitted recently, from an exudate or an exudated blastema.[37]

In the absence of evidence to the contrary, Virchow's views became largely accepted in the medical profession, beginning by his German peers and spreading to other countries in parallel to the discussion and publication of his work in other languages. Interestingly, the Spanish translation of the *Cellular Pathology*, issued in 1868, was carried out by none other than the Catalonian surgeon Giné y Partagás, who would later author his pedagogic novel on *The family of Onkos*.[38]

The solidistic theory of neoplastic formation provided legitimacy for the surgeons who performed excisions of malignant tumours. Admittedly, these surgeries had a long history; but no theory backed their practice. On the contrary, cancer surgeons were exposed to professional criticism, regardless of whether they failed or succeed in achieving a patient's permanent cure. A Hippocratic warning – enduringly quoted in medical treatises as *Aphorism 38* – prevented surgeons to operate on cancers on the basis that it only accelerated the course of the condition: "[i]t is better to give no treatment in

[36] Ibid.
[37] Ibid., 48.
[38] A decade later, Virchow's ideas were mainstream in the field of Spanish oncology. See, for instance, in a monograph on cancer, Salvador Badía y Andreu, *Del origen del cáncer con relación a su tratamiento. Conferencia pública dada en la Academia Médico Farmacéutica de Barcelona* (Barcelona: Establecimiento Tipográfico de Ramírez y Ca., 1876). More revealingly in terms of the wide dissemination of these ideas, see the following elementary course of pathology: Andrés Busto y López, *Curso de patología médica fundamental, en 50 cuadros sinópticos, o prolegómenos del curso de patología médica, dado en la Facultad de Medicina de Madrid* (Madrid: Imprenta de Gómez Fuentenebro, 1877).

cases of hidden cancer; treatment causes speedy death, but to omit treatment is to prolong life".[39] However, if the malignant tumour did not reproduce, surgeons still risked an accusation of misdiagnosis. This idea was pervasive across the centuries, up to the mid-nineteenth century. Virchow himself gave the example of one of his contemporaries, the surgeon Johann Nepomuk Rust. According to this practitioner from Austrian Silesia, "when we believe that we have excised a cancer and the individual still lives three years later, it was not a cancer and the diagnosis was false".[40]

Virchow's cellular theory had a profound and lasting impact in medical thought and practice. However, it did not solve all problems. Firstly, in refuting the idea of essential dyscrasias, the mechanism through which atypical cells developed in the first place remained unclear. At the most, the Prussian pathologist resorted to the existing notion of *constitutional diathesis,* which designated a *predisposition* to disease that was devoid of a referent object.[41] In the following decades, the medical profession relied on this abstract idea to explain the spontaneous onset of malignant neoplasms; that is, their development in the lack of any other conceivable cause. In addition, the alleged presence or absence of a constitutional diathesis served to justify that not all people exposed to a same disease-trigger fell ill.[42] Finally, the incidence of one form or another of malignancy in individuals of a same family was also attributed to the inheritance of a diathesic predisposition to cancer. This notion would only materialise into a scientific object well into the 1970s, with the genetic isolation of the first "proto-oncogenes".[43]

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[39] Hippocrates, "Aphorisms", in *Hippocrates: Vol. IV,* 189. The meaning of "occult" cancer is unclear. In a different treatise, a Hippocratic writer alluded to a difference between "occult cancers", which developed during adulthood (from puberty to about sixty years old) and were incurable, and "superficial cancers", which affected older people and were not responsible for their death; Hippocrates, "Prorrhétique", Second Book, Section 11, 33. Arguably, the Aphorism referred to non-ulcerated cancer (though it might ulcerate later on). Over the course of the centuries, however, the term "occult cancer" was sometimes interpreted as meaning "cancer of internal organs", as opposed to external cancers (for instance, in the breast), which were amenable to a surgical excision.

[40] Virchow, *Pathologie des tumeurs,* Vol.1, 113.

[41] Ibid., 67.

[42] More information on these issues will be given in Chapter 5.

[43] Joan H. Fujimura, *Crafting Science: A Sociohistory of the Quest for the Genetics of Cancer* (Cambridge, MA, and London: Harvard University Press, 1996).

Secondly, the idea of the *curability* of cancer through an early and thorough operation did not automatically translate into the possibility of *curing* cancer patients. Beyond a supporting scientific theory, other conditions of realisation were needed in order to successfully cure a patient. In this regard, the medical acceptance of "the death of Prince Carcinoma" as an attainable goal was favoured by the parallel popularisation of major innovations in surgical practice: namely, chemical anaesthesia, antisepsis, and asepsis, with the two latter terms designating the destruction of germs and the absence of germs in a surgical wound, respectively. The two following sections will probe into this issue. Each section will begin by reviewing the introduction of new chemical agents – first, ether and chloroform; and second, carbolic acid – in Western surgical practice. Then, the analysis will focus on their slow process of normalisation in Spanish hospitals. The discussion will still mostly adopt the doctors' point of view. Nevertheless, it will be significant for contextualising cancer patients' emotional attitudes towards their prognosis and therapeutic options.

I.2.2. Ether and Chloroform

On 16th October 1846, the Boston surgeon John Collins Warren excised a tumour from the neck of a patient named Gilbert Abbott. Even though the surgical procedure was not particularly complex, it took place in the Massachusetts General Hospital amphitheatre, under the watchful eye of a group of renowned US practitioners. What had stirred up the interest of the distinguished audience was not the operation itself, but rather what had occurred prior: the dentist William T.G. Morton made Abbott to breathe ether for about three minutes, until he fell into a state of insensibility. Shortly after the surgery concluded, the convalescent man reported that he did not experience pain during the intervention. At the most, he sensed as if his neck had been "scratched".[44] The first successful public demonstration of the anaesthetic property of ether had just taken place. Slightly over a year later, the Scottish

[44] Edmond I Eger II, Lawrence J. Saidman, and Rod N. Westhorpe, "1844-1846: The Discovery and Demonstration of Anesthesia", in *The Wondrous Story of Anaesthesia,* ed. Edmond I Eger II, Lawrence J. Saidman, and Rod. N. Westhorpe (New York: Springer, 2014), 22.

obstetrician James Young Simpson obtained similar results through the inhalation of chloroform. On 10th November 1847, he presented these original findings to the Medico-Chirurgical Society of Edinburgh, and they were published soon thereafter.[45]

In the past, attempts at painless surgery had been carried out through a variety of means, ranging from concoctions made with the juice of the mandrake plant or the opium poppy, to the use of alcoholic beverages, and even a blow in the head. However, the risk of producing irreversible effects – leading, ultimately, to the death of the patient – precluded their widespread acceptance.[46] Whilst the physical suffering of the patient was a historical concern for the medical profession, it was not as important as the duty of preserving human life. Following the US historian Martin S. Pernick, the dominant surgical ethos from Greek and Roman Antiquity to the mid-nineteenth century can be summarised as follows: firstly, pain should never be needlessly inflicted; thus, in the realm of therapeutics, surgery was generally conceived of as a last resort. Secondly, if an amount of surgical pain was needed to save a life, the surgeon had to remain in control of his own emotions, as if unmoved by the patient's suffering, so as to not compromise the success of his work.[47] In this circumstance, skilful promptitude stood as the best asset of the practitioner for gaining a patient's trust and gratitude; or, at the very least, some money.[48]

When the news of the anaesthetic properties of ether and chloroform first reached the general press in Western countries, they were caught up in a wave

[45] A significant number of historians of medicine have already researched the history of the advent of chemical anaesthesia in the Western World. A listing of relevant works can be found in Moscoso, *Pain,* 112 (note 6). Few of them have noted, however, that the anaesthetic properties of ether were already known since the early-nineteenth century, notwithstanding that ether was not used in surgical practice until much later. For an analysis of the reasons underlying this gap, see Joanna Bourke, *The Story of Pain: From Prayer to Painkillers* (Oxford and New York: Oxford University Press, 2014), 272-275.

[46] Edmond I Eger II, Lawrence J. Saidman, and Rod N. Westhorpe, "History to 1798", in *The Wondrous Story of Anaesthesia,* ed. Edmond I Eger II, Lawrence J. Saidman, and Rod. N. Westhorpe (New York: Springer, 2014), 4. For a consideration of this issue in the context of early-nineteenth-century medical discussions on the usefulness of iatrogenic pain, see Moscoso, *Pain,* 93.

[47] Martin S. Pernick, "The Calculus of Suffering in Nineteenth-Century Surgery", *The Hastings Center Report* 3(2) (1983): 27.

[48] Moscoso, *Pain,* 114.

of enthusiasm. It finally seemed that the time had come to reconcile the major duty of practitioners with the gruelling task of having to recur to sharp instruments. Nevertheless, the popularisation of chemical anaesthesia did not occur overnight. Contrary to the most optimistic expectations, neither ether nor chloroform were able to resist proof that they may endanger the patient's life. In the years following their introduction into surgical practice, their use was at the centre of a medical controversy opposing radical detractors to other surgeons who engaged, following Pernick's terms, in a "calculus of suffering"; that is, in pondering "whether the benefits of painless operations were worth the risks".[49] On each side of the debate, similar arguments traversed Western Europe. From here on, the Spanish context will serve as a case study to review the slow process through which chemical anaesthesia became widely accepted in surgical practice.

The specific goals of this analysis are twofold. Firstly, it aims at tracing a substantial shift that took place in the surgeons' ethical code of conduct, which had major consequences for cancer-related procedures. In summary, the popularisation of painless surgery allowed performing *longer*, and, as such, *better* excisions of cancerous tumours. Before the operation was carried out, there were no means to precisely calculate how far the cancer had spread. Hence, the use of chemical anaesthesia granted surgeons with precious extra time to, firstly, examine the extent of the anatomical lesion within the organism; and, secondly, remove it as thoroughly as possible, in order to minimise the chances of its reproduction. Given that it took decades for Spanish surgeons to systematise the administration of chloroform in their everyday practice, a second aim of this section is to examine the ways in which, in the meantime, professional attitudes over the use of this agent influenced the expectations and decisions of cancer patients facing the possibility of an operation.

Within the history of anaesthesiology in Spain, two publications are especially relevant. In 2001, Bartolomé Fernández Torres, Carlos Márquez-Espinós, and Mariano de las Mulas Béjar examined different medical attitudes towards surgical pain in an article titled "Controversias entorno al dolor y la anestesia

[49] Pernick, "Calculus of Suffering", 28.

inhalatoria en la España del siglo XIX" ("Controversies about pain and inhaled anaesthesia in nineteenth-century Spain").[50] In 2004, Avelino Franco Grande, Julián Álvarez-Escudero, and Joaquín Cortés Laíño co-authored the book *Historia de la anestesia en España. 1847-1940* (*History of Anaesthesia in Spain. 1847-1940*), which also included a comparative approach with other Western European contexts.[51] These works serve as background information for this section. Nevertheless, the evidence they present and the interpretations they offer have been both complemented and nuanced through my own original research on the general press, the reference medical journal *Boletín de Medicina, Cirugía y Farmacia* (from now on, BMCF), and a compilation of clinical records of cancer patients treated at the University Hospitals of Madrid and Valencia.

In Spain, just like in the rest of Western European countries, the general press was eager to announce the introduction of a new anaesthetic agent in the operation room.[52] On 16th December 1847 – just a month after the original publication of James Young Simpson's findings – the newspaper *El Español* extolled the virtues of chemical anaesthesia in the following terms:

> It is less than a year that etherisation triumphs over pain and blunts the action of the scalpel, and it already has to give up its post to a rival that comes with greater recommendations and more indisputable rights. This agent is *chloroform*.[53]

Two weeks later, in an article published in this same newspaper, a Professor of Surgery at the University of Madrid claimed that chemical anaesthesia was as creditable as "vaccination, the printing press, and steam [engines]", as it had entered medical practice to resolve "the difficult issue of not feeling". With respect to chloroform, specifically, the Professor foretold that it would enjoy a long-lasting reputation as a "solace of mankind" and the "glory of painful

[50] Bartolomé Fernández Torres, Carlos Márquez-Espinós, and Mariano de las Mulas-Béjar, "Controversias en torno al dolor y la anestesia inhalatoria en la España del siglo XIX", *Revista Española de Anestesiología y Reanimación* 48 (2001): 235-243.
[51] Avelino Franco Grande, Julián Álvarez Escudero, and Joaquín Cortés Laíño, *Historia de la anestesia en España. 1847-1940* (Madrid: Arán, 2005).
[52] Franco Grande et al., *Historia de la anestesia en España,* 24-28 and 52.
[53] "La eterización destronada", *El Español,* 16th December, 1847, 2.

surgery".[54] In the following days, other mainstream newspapers such as *El Heraldo, El Popular, El Clamor Público,* and *El Eco del Comercio* disseminated this news all over the country.[55]

Meanwhile, the surgeons Vicente Guarnerio and José González Olivares, practitioners at the Surgery Clinic of the University of Santiago de Compostela, had been the first to test the new anaesthetic agent on two of their patients. Coincidentally, both were cancer patients. When the robust Galician man whose penis Guarnerio had just amputated slowly regained consciousness, he demonstrated complete unawareness that the operation had already taken place. Following the procedure, the Dean of the Faculty reported that the patient's first utterance was: "When will you cut me?".[56] Similarly, González Olivares reported his "amazement" at the insensibility of the middle-aged woman on whom he excised a *breast scirrhus* that had spread to the axillary glands. As he detailed: "these nerves that used to stir up screams of the greatest pain at the contact with the end of the scalpel were instead cut and handled with impunity".[57] On this occasion, the higher complexity of the operation meant that it took much longer than the previous one, so that multiple chloroform sprayings were required throughout.

As the news of these triumphs over surgical pain spread throughout the country, along with other successful cases reported via the foreign press, Spanish practitioners began to follow the initiative of their Galician colleagues. On 3rd February 1848, the general newspaper *El Espectador* commented:

> Day by day, the news regarding the successful action of this substance is more satisfactory. The number of patients who have endured a surgical

[54] "Del cloroformo", *El Español,* 30th December, 1847, 4.
[55] The article "La eterización destronada" was reproduced, amongst other journals, in: *El Heraldo,* 18th December, 1847: 3; *El Popular*, 22th December, 1847, 4; *El Clamor Público,* 23rd December, 1847, 4. The article "Del cloroformo" was reproduced, for instance, in *El Eco del comercio,* 2nd January, 1848, 2. The publication of this news is mentioned – without any direct quote or analysis – in Franco Grande et al., *Historia de la anestesia en España*, 79.
[56] Vicente Guarnerio, "Ensayos sobre el cloroformo", *Gaceta Médica* 3 (1847): 282. Quoted in Franco Grande et al., *Historia de la anestesia en España,* 55.
[57] José González Olivares, "Inhalaciones del cloroformo", *Boletín de Medicina, Cirugía y Farmacia* 105 (2nd January, 1848): 6.

> operation without feeling the cruel pain that this therapeutic means always causes is already noteworthy".[58]

This wave of public enthusiasm, however, did not outlive the winter. In late February, the BMCF published the news that the inhalation of chloroform had "provoked dangerous convulsions with an imminent risk of asphyxia" in a young British man. Even worse, it had caused "the death of a young woman", and the surgeon who had performed the operation had ended up facing a trial.[59] Hannah Greener, aged 15, had died on 29th January in Newcastle upon Tyne. Hers was the first reported death worldwide attributed to chloroform. On the grounds that the family of the patient had insistently demanded the use of the anaesthetic agent prior to the operation, the jury ruled the acquittal of the unfortunate practitioner who administered it.[60] Even so, the editors of the BMCF sentenced: "A warning to our surgeons".[61]

A call for cautiousness had been launched. Even more, the evidence seemed sufficiently sound for turning individual scepticism over the benefits of chemical anaesthesia into a fierce campaign against its use. In the name of the common good and the prestige of the medical profession, the surgeon Manuel Santos Guerra, a respected practitioner at the public *Hospital General* of Madrid, became the champion of this cause during the mid-nineteenth century. On 26th March 1848, his first article on chemical anaesthesia for the BMCF began with a clear declaration of intentions:

> Shortly after etherisation was tested for the first time in Madrid, a young student … suggested: "Why don't you test ether next time you have to perform an operation in the hospital, so that you have the pleasure of being the first in doing it in this establishment?" I appreciate[d his] good intentions, but … I think that an agent that is capable of suspending life for some time can also extinguish it forever; if a single case happened, I would openly declare war on it.[62]

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[58] "Efectos del cloroformo", *El Espectador*, 3rd February, 1848, 3.
[59] "Revista médica inglesa", *Boletín de Medicina, Cirugía y Farmacia* 113 (27th February, 1848): 6.
[60] "Revista médica inglesa", *Boletín de Medicina, Cirugía y Farmacia* 121 (23th April, 1848): 5; "Cloroformización", *Boletín de Medicina, Cirugía y Farmacia* 123 (7th May, 1848): 4-5.
[61] "Revista médica inglesa", 113: 6.
[62] Manuel Santos Guerra, "Breves reflexiones sobre la eterización y cloroformización", *Boletín de Medicina, Cirugía y Farmacia* 117 (26th March, 1848): 3.

Over three years, Santos Guerra kept his word and repeatedly engaged in public controversy with colleagues advocating, with more or less precautions, for the use of chloroform. A review of the series of articles that he published in the BMCF between 1848 and 1851, allows, on the one hand, to delve into the traditional standard of the virtuous practitioner and the good operation, in a new context in which this code of ethical conduct was contested. On the other hand, it shows the cultural resources that a detractor of chemical anaesthesia employed in order to persuade cancer patients, specifically, that the advantages of enduring surgery without anaesthesia largely outweighed its inconveniences.[63]

Under vitalist assumptions, Santos Guerra held the absolute conviction that chemical anaesthetic agents produced severe alterations in the circulation of blood. In the state of insensibility, the blood flow lost its vigour, manifested by a weak pulse. In contrast, once the patient regained consciousness, it became too abundant in the location of the wound, complicating its healing. In both phases, life – which ultimately belonged to the Lord – was unnecessarily endangered.[64] Against the backdrop of colleagues who defended the use of chloroform as the expression of a humanitarian duty, Santos Guerra counter-argued that surgery without anaesthesia best fulfilled this obligation to the patients. Along with the moral virtues of "courage", "patience", "resignation", and "decision", all indispensable requisites for bearing the infliction of surgical pain with a strict professionalism, a skilful practitioner had to demonstrate

[63] For a more general approach to the public discussions between the surgeons Manuel Santos Guerra, Basilio San Martín, and Bonifacio Blanco Torres during the spring of 1848, see Franco Grande et al., *Historia de la anestesia en España,* 118-119. These authors – who are anaesthesiologists and not historians – reduced the position of Santos Guerra to an "ideological non sense". For a description of the public embroilment between Manuel Santos Guerra and Eusebio Castelo Serra that took place between January and April 1850, see Fernández Torres et al., "Controversias entorno al dolor", 237-238. This article, however, does not provide any interpretation of the evidence, nor points to the relevance of the dispute for the experience of cancer patients.

[64] Santos Guerra, "Breves reflexiones sobre la eterización y la cloroformización", 4; Manuel Santos Guerra, "Defensa de las reflexiones que sobre eterización y cloroformización expuso el Dr. Manuel Santos Guerra", *Boletín de Medicina, Cirugía y Farmacia* 125 (21st May, 1848): 6.

"compassion";[65] and he did so as long as he put great care in achieving an "economy of suffering".[66] Through this expression, Santos Guerra designated a variety of means aimed at mitigating both the emotional and physical pain that the operation produced.

Firstly, the anxiety of the patient on the anticipation of surgical pain was less burdening if the surgeon managed to conceal for as long as possible the moment in which the operation began. To this aim, the surgical instruments and dressings had to be kept hidden from view; and, similarly, assistant-surgeons had to remain at a distance before their cooperation was needed. Secondly, physical sensibility was at least partially numbed through the manual or mechanical compression and stretching of the skin surrounding the diseased part of the body in the opposite direction to the movement of the scalpel. But, above all, the humanitarian surgeon had to perform his work as quickly as possible.[67] As Santos Guerra stated: "promptness in operations is a requisite in the absence of which the practice of surgery cannot be seen without shivering".[68] In this regard, when he published the report of the excision of an *ulcerated scirrhus in the left breast* of a Mrs Ángela Fernández, he proudly specified that it had taken him less than five minutes.[69]

At the time of Mrs Fernández's operation, which took place on 26th February 1850, Santos Guerra was engaged in a public discussion – via the BMCF – over the consequences of the use of chloroform in a young woman with initials J.G., who had also been diagnosed with a *scirrhus in the left breast*. Three weeks earlier, Eusebio Castelo – a recent graduate in medicine who witnessed J.G.'s surgical procedure – publicly praised the usefulness of the chemical agent. Owing to its administration, the practitioner Melchor Sánchez de Toca was able to proceed, on the incision of the flesh, to "a careful examination of the

[65] Manuel Santos Guerra, "Modificación de dos instrumentos", *Boletín de Medicina, Cirugía y Farmacia* 4 (26th January, 1851): 2.
[66] Santos Guerra, "Breves reflexiones sobre la eterización y la cloroformización", 5.
[67] Manuel Santos Guerra, "Más reflexiones sobre la eterización y cloroformización", *Boletín de Medicina, Cirugía y Farmacia* 122 (30th April, 1848): 7.
[68] Santos Guerra, "Breves reflexiones sobre la eterización y la cloroformización", 5.
[69] Manuel Santos Guerra, "Escirro ulcerado del tamaño de una naranja mediana, en la región mamaria izquierda; extirpación cruenta seguida de buen éxito", *Boletín de Medicina, Cirugía y Farmacia* 223 (21th April, 1850): 5.

wound", which made him realise that the cancerous tumour was larger than initially expected; and, consequently, that the whole breast of the patient had to be amputated. Instead of seconding Castelo's view on the case as an example of the kind of "operations in which not everything could be foreseen" and, as such, that meticulousness was preferable to promptitude in cancer surgery, Santos Guerra blamed chloroform as the agent that had triggered the spread of the malignant tumour in the last minute.[70]

For our purposes, the relevance of this medical discussion is twofold. For one thing, it suggests that partisans and resisters of chemical anaesthesia supported two contrasting models of a virtuous cancer surgeon and, consequently, of a good operation. For another, it allows delving into the rhetorical strategy that a fierce detractor of the use of chloroform employed in order to persuade his own patients of its pernicious effects. In his public embroilment with Castelo, Santos Guerra exposed his arguments in the technical language of science. As he detailed, the anaesthetic agent had provoked "a congestive and vascular enlargement" in the mammary organ that, ultimately, "condemned that important gland to the cutting edge of the scalpel".[71] In contrast, at the bedside of the mentioned Mrs Fernández, the practitioner described cancer as "an evil guest" and "an insidious enemy" that was "hiding" in her breast. He stressed that, "it was indispensable to catch him asleep", and, consequently, that "it was not convenient to awake him with the chloroform". Cleverly, Santos Guerra spoke "the language of intimate conviction", which involved the representation of cancer as a wild animal.[72]

As seen in Chapter 1, animalomorphic representations of cancer were common in medical treatises from Roman Antiquity to the late Middle Ages. Meanwhile, in the domain of Catholic religion, an episode of the hagiography of the Patron

[70] Eusebio Castelo Serra, "Escirro de la mama izquierda; no circunscrito. Extirpación total de la glándula del mismo lado. Uso del cloroformo. Curación completa a los 43 días. Operación practicada por el distinguido catedrático D. Melchor Sánchez Toca", *Boletín de Medicina, Cirugía y Farmacia* 212 (20th January, 1850): 4-5; Manuel Santos Guerra, "Breves reflexiones por el Dr. D. Manuel Santos Guerra, a la observación de un escirro operado, que publica el Boletín del 20 de enero, recogida por D. Eusebio Castelo y Serra", *Boletín de Medicina, Cirugía y Farmacia* 216 (17th February, 1850): 4.
[71] Santos Guerra, "Breves reflexiones sobre la eterización y la cloroformización", 4.
[72] Santos Guerra, "Escirro ulcerado", 6.

Saints of medicine Cosmas and Damian told that the holy brothers once recommended a woman who had breast cancer to eat pork, but, as she was Jewish, the piece of meat was left on her chest. Soon after, the woman was miraculously cured from her illness, and, out of gratitude, she converted to Catholicism.[73] At some point, these medical and religious views on cancer merged into a widespread belief. In 1852, an article on "popular errors" published in the newspaper *La Esperanza* stated:

> On showing their cancerous breasts to the surgeon, so many of these poor women have pieces of calf or cow pressed to them. The wretched beings suppose that their illness is a hungry monster, and they want to offer an alternative pasture to their breast for satiating him and thus preserving themselves for some time.[74]

A year later, the Galician surgeon González Olivares commented on this same issue in the medical journal BMCF. In his view, "the common people, faithful custodians of out-dated beliefs and traditional errors, always seduced by the wondrous", had transmitted this "chimeric opinion" from generation to generation up to the present.[75]

In the particular case of Mrs Fernández, no evidence confirms that she spent her savings on kilograms of red meat. Still, she must have been acquainted with the conception of cancer as a ferocious creature. On the day of her operation, she found it reasonable to decline the use of chloroform in order to "catch the malignant element by surprise".[76] In all likelihood, a patient's decision to subject themselves to a surgical procedure with or without anaesthesia was heavily influenced both by the authority that medical men were usually granted, as well as by their ability to communicate their views in terms that were adapted to the cultural references of their patients. At the same time, other people exerted

[73] De Moulin, *Short History of Breast Cancer,* 12.
[74] B.M., "Variedades", *La Esperanza*, 16th August, 1852, 4
[75] González Olivares, "Clínica Quirúrgica", 113: 2. This popular belief persisted in the following decades. On this issue, see Adolfo Moreno Pozo, *Tratado de patología quirúrgica general* (Madrid: Imprenta y Fundición de Manuel Tello, 1878), 654; José López Dóriga, *Medicina Popular: Apuntes para el folklore asturiano* (Gijón: Imp. y Lit. de Torre y Comp., 1890), 36.
[76] Santos Guerra, "Escirro ulcerado", 6.

a similar or even greater influence on the patients' choice. In 1851, Castelo reported the following case:

> A lady of this court who endured the excision of a breast scirrhus resisted to the inhalations of chloroform whilst she insistently demanded *something for not feeling.* Such a contradiction kept bothering us; but we learned afterwards that the confessor had advised her *not to take the chloroform, as both she and her soul might die on the spot.*[77]

Arguably, then, the discussion on the disadvantages of chemical anaesthesia transcended the medical community. Clearly, some representatives of the Catholic Church also had their say on the matter.

Despite the persuasive admonitions of the detractors of chemical anaesthesia, the majority of Spanish surgeons did hold the conviction that the benefits of painless surgery were worth taking at least some measured risks. Over the years, their own practice, coupled with reports of other practitioners, made them well aware of the variety of accidents that could occur under chloroform. These ranged from violent cough, vomiting, spasms, and convulsions to catalepsy, asphyxia, a cardiac syncope and, ultimately, the death of the patient.[78] In addition, any traces of the anaesthetic agent that could remain in the organism might compromise postoperative recovery. Confronted by all the threats posed by the use of a chemical agent whose effects they did not master, the Spanish medical profession usually adopted a conservative approach to the administration of chloroform. To avoid the risk of an overdose, surgeons tended to administer small quantities of the fluid, which only numbed the senses of the patient for a few minutes and did not necessarily prevent the reflex movements of involuntary muscles.[79]

Intermittent semi-anaesthesia, or mere analgesia, rather than full and permanent insensibility, remained the usual surgical scenario for more than

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[77] Eusebio Castelo Serra, "Sobre el dolor en las enfermedades y principalmente en las operaciones quirúrgicas. Artículo III", *Boletín de Medicina, Cirugía y Farmacia* 263 (12th January, 1851): 3.

[78] Franco Grande et al., *Historia de la anestesia en España,* 69. The first death rigorously attributed to chloroform in Spain occurred as early as 24th May 1849 in a public hospital located in Madrid.

[79] Ibid.*,* 89-92 and 114-126.

three decades. Even by 1874, a recent graduate of the Medical Faculty of Barcelona still noted:

> Many are the surgeons who, out of prudent fear, do not apply anaesthesia to the extent that their patient's sensibility and movement are completely abolished; and many are also those who begin the operation in the middle of the silence and calm that a complete anaesthesia provides, [but] end it in the middle of the groans and moans of the operated.[80]

In this general context, the cancer patients who consented to an operation with some anaesthesia still had great chances of enduring surgical pain. Unless the practitioner opted for the amputation of a whole member or organ, which was not always an option, the excision of malignant growths tended to require long and difficult procedures. Some patients demanded its interruption upon awakening from anaesthesia, despite their awareness that the operation was incomplete. Over the course of the year 1875, one of these cases occurred at the Surgery Clinic of Valencia, ultimately suggesting the patient's distrust in her surgeon, as detailed below.

In late January, the 42-year-old female peasant Vicenta Garrigós was admitted at the clinical hospital for the treatment of a *carcinoma of the left breast* that had visibly spread to a ganglion in her armpit. Professor Enrique Ferrer y Viñerta, who was the surgeon in charge of her treatment, reported that this patient accepted to undergo an operation under the effects of chloroform due to the "dreadful feeling that the disease stirred up in her".[81] By the time in which the first part of the surgery was just completed, however, she was fully awake and in such great pain that "she manifested her desire to postpone the second [part of the operation]".[82] Unable to object, the clinical surgeon advised her to return as soon as she sensed that the enlarged ganglion in her armpit was gaining

[80] Salvador Cardenal Fernández, "De la anestesia quirúrgica, de los anestésicos y en particular de la cloroformización", *La Independencia Médica,* 1874: 4. Quoted in Franco Grande et al., *Historia de la anestesia en España,* 128.
[81] Enrique Ferrer y Viñerta, *Curso de Clínica Quirúrgica de la Facultad de Medicina de Valencia: historias clínicas correspondientes al año académico de 1874 a 1875, publicadas para uso de los alumnos que estudian dicha asignatura* (Valencia: Imp. de Ferrer de Orga, 1875), 177.
[82] Ibid, 186.

volume, in order to resume its excision.[83] When, some months later, and sooner than expected, the sick woman asked for her readmission into the hospital due to a relapse, she did so with the hope that the surgeon might propose an alternative therapeutic option. As that was not the case, she preferred to leave the clinic "untreated".[84]

The administration of chloroform did not become regular practice in Spanish hospitals until the 1880s. A shift in surgical ethics was noticeable at this time. Whilst surgeons were still encouraged to master their emotions in the operation room, this was no longer in regard to the infliction of pain, but to all the possible complications involved in the use of the anaesthetic agent. In 1882, the surgeon Juan Aguilar Lara – a disciple of Ferrer y Viñerta – commented:

> When administering chloroform or any other anaesthetic comes about, acting with courage … is necessary; faced with the phenomena that will unfold, or at the memory of the unfortunate cases that the annals of operative surgery recount, the surgeon must not feel intimidated.[85]

To prevent fatal incidents in the operation room, hospitals began recruiting assistant-anaesthesiologists, who were responsible for administering the chemical agent and monitoring the patients' pulse and breath, along with other indications of their general state, such as their countenance and movement. Furthermore, if an accident occurred, these adjuvants had to be ready to use reanimation techniques. A cardiac syncope, for instance, could be counteracted through the inhalation of vinegar and ammoniac; or, if available, through magneto-faradic discharges. In cases of asphyxia, assistant-anaesthesiologists had to recur to wide jaw pliers so that they could extract the mechanical cause obstructing the larynx, or to the intubation of the patients.[86]

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[83] Ibid, 189.
[84] Enrique Ferrer y Viñerta, *Curso de Clínica Quirúrgica de la Facultad de Medicina de Valencia: historias clínicas correspondientes al año académico de 1875 a 1876* (Valencia: Imp. de Ferrer de Orga, 1876), 340.
[85] Juan Aguilar Lara, *La nueva cirugía antiséptica* (Librería de Pascual Aguilar: Valencia, 1882). Quoted in Franco Grande et al., *Historia de la anestesia en España,* 131-132.
[86] Franco Grande et al., *Historia de la anestesia en España,* 128-148.

In the late-nineteenth century, new anaesthetic substances were introduced. Morphine was sometimes used as a complement to chloroform, and cocaine as its substitute. In addition, hypodermic injection, instead of inhalation, began to be tested. Nevertheless, painless surgery failed to be systematically achieved. For instance, the clinical record of the 74 year-old farm-hand Paulino Fernández detailed that, on 6th October 1894, this patient endured the excision of an *epithelioma in the upper lip* at the Surgery Clinic of Madrid without the benefits of insensibility. The hypodermic injection of cocaine chloride administered before the procedure was ineffective.[87] Admittedly, complete anaesthesia of the nasal, oral, and laryngeal cavities remained a major challenge. In this regard, a group of medical trainees noted in 1895 that administering an effective dosage of the chemical compound of choice was still highly restricted in this kind of operations, because the patient's cooperation was required to "prevent the entrance of blood in the respiratory tract, [with subsequent risk of] suffocation and death".[88]

Overall, the popularisation of chemical anaesthesia in Spanish surgical practice was undoubtedly a slow, arduous, and controversial process. Nonetheless, in the last decades of the nineteenth century, a major shift in the ethical model of a virtuous surgeon is noticeable. The new medical mentality supported the view that the benefits of painless operations largely outweighed its risks, notwithstanding the persistence of significant exceptions to the rule. With respect to cancer surgery, the use of chemical anaesthesia brought the possibility of performing longer and, as such, more meticulous procedures. Within the framework of the cellular theory of neoplasms, this novel mode of conduct favoured the idea of cancer curability to materialise into cases of cancer cure. In the meantime, however, surgical pain and even at times anaesthesia itself remained major objects of concern for the patients who were told that the prolongation of their life or the recovery of their health depended on an operation.

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[87] Antonio García y Tapia et al., *Historias de Clínica Quirúrgica: (primer curso), con notas de algunas explicaciones del Catedrático Doctor D. José Ribera y Sans tomadas por Antonio García y Tapia* [Academic year 1894-95] (Madrid: Establecimiento Tip. de Gabriel Pedraza, 1895), 30-35.
[88] Ibid, 175-177.

I.2.3. Carbolic Acid

Along with chemical anaesthesia, another major scientific innovation transformed hospital surgery in general, and cancer-related procedures in particular, throughout this period. During 1867, the English surgeon Joseph Lister carried out a series of experiments on patients admitted at the Glasgow Infirmary, in Scotland, with the aim of preventing the suppuration of their wounds. Along with contusions, fractures and abscesses, Lister treated large surgical incisions, whose poor hygiene tended to worsen into post-operative septicaemia and, ultimately, the patient's death. On the principle that "septic germs" suspended in the atmosphere were the causing agents of the "putrefaction" of the flesh, as the French chemist and microbiologist Louis Pasteur had suggested, Lister found that "carbolic or phenic acid … appears to exercise a peculiarly destructive influence upon low forms of life".[89] His empirical observations were first published in *The Lancet* under the title "On the Antiseptic Principle in the Practice of Surgery".[90] In the following years, the *Listerian method* of antisepsis spread amongst most of Western European countries.[91]

In Spain, in contrast, its use remained limited throughout the whole 1870s.[92] At the time, the annual reports of Spanish clinical hospitals – usually at the forefront of the introduction of new medical practices – still insisted in the frequency of post-operative complications, with names as eloquent as "hospital putrefaction" ("podredumbre hospitalaria") and "hospital gangrene" ("gangrena

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[89] Joseph Lister, "On the Antiseptic Principle in the Practice of Surgery", *The Lancet* 90(2229) (21th September, 1867): 353. Within the historiography of cancer, this article was already referenced in Shimkin, *Contrary to Nature,* 149.

[90] Lister, "Antiseptic Principle", 353-356.

[91] The life and works of Joseph Lister and the process of *listerisation* in Western Europe has been the object of numerous publications. See, amongst others, Hector Charles Cameron, *Joseph Lister: the Friend of Man* (London: William Heinemann Medical Books, 1949); Richard B. Fisher, *Joseph Lister 1827-1912* (London: Macdonald and Jane's Publishers, 1977); Michael Worboys, *Spreading Germs: Disease Theories and Medical Practice in Britain, 1865-1900* (New York: Cambridge University Press, 2000); Harold Ellis, *The Cambridge Illustrated History of Surgery,* Second Edition (Cambridge: Cambridge University Press, 2008), 73-124.

[92] Salvador Cardenal Fernández, *Guía práctica para la cura de las heridas y la aplicación del método antiséptico en cirugía* (Barcelona: Biblioteca Ilustrada de Espasa Hermanos Editores, 1880), vi-vii.

de hospital").[93] According to the Chief Surgeon at the Surgery Clinic of Valencia, Ferrer y Viñerta, the reason for the elevated number of these cases was due to the fact that the operation room was located "in one of the basement rooms of the main ward of the establishment, whose floor was humid, and which had few light and scarce ventilation".[94] Meanwhile, a Professor at the *Hospital Provincial* of Madrid noted that these poor hygienic conditions were also common in hospital wards. Furthermore, he denounced a usual "carelessness in the laundering of bandages, which, being imperfectly clean, often become a means of contagion … worsening the diseases whose cure they should contribute to".[95]

The patients' dread of an operation gains a new dimension in light of this evidence. At worst, they knew they risked iatrogenic death; that is, death caused by the treatment received. At best, it would take weeks, or even months, for their surgical wound to heal. Unproblematic post-operative recoveries remained exceptional and widely commented in medical literature, especially if the incision had a considerable dimension, as tended to occur in cancer-related procedures. For instance, in 1875, Ferrer y Viñerta reported the unusual case of the 54-year-old female patient Manuela Lladró, who had a *sarcoma of the left breast*. As the surgeon enthusiastically stated: the "[o]utcome [of the procedure] could not have been more favourable".[96] Despite the magnitude of the incision, which had been sixteen centimetres long, it completely healed up in twenty days, a result that was "rarely obtained in such a short period".[97] During this time, the suture stiches remained covered with the usual dressing, which was composed of strips of French taffeta moistened with water, a breathable patch impregnated in cerate (a mixture of oil and wax), and a dry compress on top.[98]

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[93] Enrique Ferrer y Viñerta, "Clínica Quirúrgica", in *Historias clínicas. Colección extractada de las historias clínicas y quirúrgicas impresas para uso de los alumnos clínicos de la Facultad de Medicina de esta Universidad Literaria. Curso de 1872 a 1873* (Valencia: Imprenta de El Mercantil, 1873), 7.
[94] Ferrer y Viñerta, "Clínica Quirúrgica" [1872-73], 48.
[95] *Memoria del Hospital Provincial de Madrid* (Madrid: Oficina Tipográfica del Hospicio, 1876), 150.
[96] Ferrer y Viñerta, *Curso de Clínica Quirúrgica … 1874 a 1875,* 61.
[97] Ibid., 62.
[98] Ibid., 59-60.

The earliest Spanish-authored medical treatise fully dedicated to antiseptic surgery was published in 1880 under the title *Guía práctica para la cura de las heridas y la aplicación del método antiséptico en cirugía* (*Practical Guide for the Cure of the Wounds and the Application of the Antiseptic Method in Surgery*).[99] The initiative belonged to the Catalonian surgeon Salvador Cardenal Fernández, who was a disciple of Giné y Partagás. In 1875, Cardenal Fernández visited German and Austrian clinics (including, amongst others, those of the prominent surgeons Adolf von Bardeleben, in Berlin; Richard von Volkmann, in Halle; Karl Thiersch, in Leipzig; and Theodor Billroth, in Vienna) with the specific purpose of learning the principles and practice of the Listerian method. Back in Spain, he took it as his personal mission to share the experience he had gained with his country fellows, and to encourage them to perform their operations and subsequent treatment of surgical wounds in conditions of asepsis; that is, preventing their contact with "a single millimetre of impure air".[100]

To avoid the entrance of atmospheric germs into the wound, Cardenal Fernández explained, the practitioner had to take a series of scrupulous precautions before, during, and after the operation. To begin with, he had to wear a surgical gown of "irreproachable neatness", and clean all the surgical instruments that he could possibly need during the intervention in a solution of carbolic acid at five per cent concentration.[101] The same measure applied to his hands and to the body part of the patient that was about to be incised. In addition, any hair in this area had to be completely shaved. The surgical procedure in itself had to be conducted in an "artificial atmosphere", where carbolic acid was constantly sprayed, covering both the area of the surgical incision and its surroundings.[102] After the suture, the spraying still had to continue for all the time needed to place a sophisticated five-layered antiseptic dressing over the wound, including a drain for blood and other bodily

[99] José Danón, "De la antisepsia a la asepsia en la obra de Salvador Cardenal", *Medicina e Historia* 61 (1996): 3-6.
[100] Cardenal Fernández, *Guía práctica para la cura de las heridas,* vi-viii and 89.
[101] Ibid., 94-95.
[102] Ibid., 96.

discharges.[103] If all these precautions were carefully observed, the asepsis of the wound would be guaranteed.

As a practical illustration of the value of the Listerian method, Cardenal Fernández detailed the case of a mastectomy that he had recently performed in a 67-year-old woman showing "an enormous ulcerated carcinoma" in the right breast.[104] Even though the amputation of the whole mammary organ left a "colossal" surgical wound of more than twenty centimetres in length and ten to twelve centimetres in width, a healthy scar was visible within a week.[105] Only the three small points in which the draining system was inserted right after the operation remained incompletely closed. Moreover, during this time, the female patient did not have fever or any other complication revealing the appearance of infection. To highlight the significance of these results, which greatly contrasted to the usual post-operative course of patients in this kind of operations, Cardenal Fernández rhetorically asked his peers: "[h]ave you already witnessed such a [healing] course in wounds of the dimensions of the case that concerns us with the usual methods of cure? I believe that none of you will fail to answer in the negative!" [106]

Asides from a significant increase in the patients' chances of post-operative survival, the joint use of a profound anaesthesia and Listerian techniques also created favourable conditions for attempting the surgery of internal organs. In this regard, the Prussian surgeon Theodor Billroth, who worked at the Vienna General Hospital, remains specially praised for a number of achievements, including the first esophagectomy, in 1871; the first suprapubic bladder tumour removal, in 1875; and the first successful gastrectomy, in 1881.[107] As might be expected, it was more difficult to maintain post-operative conditions of asepsis in procedures involving the natural orifices of the body (such as the mouth and genitals) or the internal cavities in necessary communication with the external

[103] Ibid., 99-107.
[104] Ibid., 120.
[105] Ibid., 119-121.
[106] Ibid., 124.
[107] Shimkin, *Contrary to Nature,* 151-152. See also William Silen and Elizabeth A.M. Frost, "Surgery Before and After the Discovery of Anesthesia", in *The Wondrous Story of Anaesthesia,* ed. Edmond I Eger II, Lawrence Saidman, and Rod N. Westhorpe (New York: Springer, 2014), 181.

environment (such as the trachea and the rectum). In these cases, additional precautions had to be taken. For instance, in the surgery of the uterus or the bowels, Cardenal Fernández recommended a continual irrigation of the vagina or the rectum with a solution of salicylic acid, which was found to be less aggressive than carbolic acid for the mucous membrane.[108]

In the last two decades of the nineteenth century, a number of Spanish practitioners began testing surgical procedures for the partial or complete removal of internal organs, including cancer-related procedures. In May 1888, at a Spanish Conference on Gynaecology held in Madrid, the surgeon Eugenio Gutiérrez – Professor at the *Instituto de Terapéutica Operatoria* of the Hospital *La Princesa* – announced that vaginal hysterectomy, or the surgical removal of the uterus through the cervical canal, had been recently performed in up to eight women diagnosed with cancer. He himself was responsible for five cases, and his working colleague Federico Rubio y Galí for the remaining three. With one exception, the operation had been successful and the patients were still alive. In more detail, Gutierrez claimed, optimistically, that "four [of these women] can be considered radically cured". Nevertheless, he also admitted that two other patients had already experienced a relapse, and that it was still too soon to confirm the outcome of the most recent operation.[109]

Meanwhile, other surgeons performed gastrectomies and gastroenterostomies; that is, respectively, a partial removal of the stomach and the surgical connection of this organ with the small intestine. In the country capital, the surgeons José Ribera y Sans, Alejandro San Martín, José Ortiz de la Torre, Luis Guedea y Calvo, and Juan Bravo Coronado ventured into this new domain. With the exception of the latter, who worked at the *Hospital General,* all were based at the University Hospital of Madrid. In Barcelona, Salvador Cardenal, Sebastián Recasens, and Francisco Rusca tested the procedures at the

[108] Cardenal Fernández, *Guía práctica para la* cura de las heridas, 155-156.
[109] Eugenio Gutiérrez, "La histerectomía vaginal en España", in *Actas de las sesiones del Congreso Ginecológico Español celebrado en Madrid en mayo de 1888* (Madrid: Establecimiento Tipográfico de Gabriel Pedraza, 1889), 199-200. Within the historiography of cancer, this work was previously referenced in Isabelle Renaudet, "Vaincre le cancer de l'utérus: de la "fureur opératoire" aux débuts de la radiothérapie. Le cas de l'Espagne (années 1880-Première Guerre Mondiale)", in *Lutter contre le cancer (1740-1960),* coord. Didier Foucault (Toulouse: Privat, 2012), 183.

Hospital de Nuestra Señora del Sagrado Corazón; Pedro Esquerdo at the *Hospital de Santa Cruz,* and Miguel Fargas at the University Hospital. In addition, Mauricio Domínguez Adame introduced gastric surgery in Seville; Enrique Diego-Madrazo in Santander; and a Doctor Caldelas in Santiago de Compostela.[110] By the turn of the nineteenth century, surgery of the uterine and abdominal cavities was spreading in hospital practice, thus increasing the number of cancers deemed as operable and, as such, curable. In contrast, the chest cavity remained an unexplored territory.

In sum, this chapter has focused on the emergence of the medical understanding of a surgical excision – or, alternatively, of an amputation – as the sole means through which cancer could possibly be cured. Within medical thought, the cellular theory of neoplastic formation provided an unprecedented legitimacy to the idea that malignant conditions were primitively local, instead of systemic; and, as such, that they were curable through an early and thorough operation. Meanwhile, in medical practice, the simultaneous popularisation of chemical anaesthesia, antisepsis, and asepsis meant that this idea could materialise more successfully into cases of cancer cure, both in external and internal organs. Despite national differences in the pace of assimilation of theoretical and technological innovations, the argument presented for the Spanish case is consistent with the changes that occurred in the rest of Western Europe. In the last decades of the nineteenth century, *operability* and *curability* largely became synonym terms in cancer clinical therapeutics.

Despite this, the *effective cure* of cancer remained far from the norm in surgical practice. During the academic course 1894-95, Professor Ribera y Sans addressed this issue in a lecture titled “Condiciones que deben llenarse en la extirpación de los tumores malignos y dificultades para que sea completa” (“Conditions That Have To Be Observed in the Excision of Malignant Tumours and Difficulties for its Completion”).[111] In his preliminary observations, the experienced surgeon insisted in that “excision is the only curative treatment” and noted that, “nowadays, the procedure shows more results than years ago,

[110] Franco Grande et al., *Historia de la anestesia en España,* 387-388.
[111] García y Tapia et al., *Historias de Clínica Quirúrgica (primer curso)* [1894-95], 5-11.

owing to the improvements in surgery … asepsis, and anaesthesia".[112] Immediately after, however, he conceded that "relapses are still frequent".[113] More bluntly still, his colleague Ramón Jiménez y García instructed his medicine trainees in that cancer reproduction remained "the general rule in the majority of the cases".[114] To account for this circumstance, late-nineteenth-century Spanish surgeons pointed to technical limitations, but also to the patients' attitude towards their illness.

With regard to the first issue, Ribera y Sans contended that the major obstacle that cancer surgery faced was that "the apparent neoplastic lesions are far from the real ones".[115] In more detail, the problem regarded the spread of cancerous cells to surrounding or distant tissues that seemed healthy to the naked eye. Therefore, the practitioner advised that, wherever possible, "it is necessary … to cut further with the scalpel".[116] For instance, in breast cancer surgery, the operation ought to include, in all cases, an "excavation of the armpit" to excise all lymphatic glands and vessels, along with the "remov[al of] muscular fibres" from the pectoral.[117] Likewise, in diagnoses of osteosarcoma of the limbs, he asserted that "the rule for the procedure is the disarticulation [of the bone] or the amputation".[118] In many other cases, however, surgeons encountered "unconquerable difficulties", such as the proximity or adherence of the lesion to a vital organ, the carotid triangle, or the femoral triangle. In these

[112] Ibid., 5.
[113] Ibid.
[114] Manuel Márquez et al., *Historias Clínicas de la asignatura de Clínica Quirúrgica (primer curso) a cargo del Doctor D. Ramón Jiménez y García, recogidas por los alumnos de esta asignatura, recopiladas y publicadas por alumnos internos de la Facultad de Medicina. Curso de 1893 a 94* (Madrid: R. Jaramillo, Impresor, 1894), 76.
[115] García y Tapia et al, *Historias de Clínica Quirúrgica (primer curso)* [1894-95], 5.
[116] Ibid., 6.
[117] Ibid., 7-8. In the late-nineteenth century, the US surgeon William Stewart Halsted devised a more aggressive procedure, known as the "radical mastectomy"; William S. Halsted, "The Results of Operations for the Cure of Cancer of the Breast Performed at John Hopkins Hospital from June 1889, to January 1894", in *Medical Classics,* Vol. 3 (Baltimore, MD: The Williams & Wilkins Company, 1939), 441-475. The radical mastectomy soon became a popular operation and remained widely in use for most of the twentieth century. For a study of Halsted's radical mastectomy from the perspective of doctor-patient interaction, see Ellen Leopold, *A Darker Ribbon: Breast Cancer, Women and Their Doctors in the Twentieth Century* (Boston: Beacon Press, 1999).
[118] García y Tapia et al., *Historias de Clínica Quirúrgica (primer curso*) [1894-95], 7.

cases, Ribera y Sans stressed: “we can assure that, if the operation is attempted, it will remain incomplete”.[119]

Along with these technical limitations, other practitioners blamed the cancer patients themselves for their seemingly uncooperative behaviour. Following the teachings of Professor San Martín and his own experience at the Surgery Clinic of Madrid, the trainee Manuel Álvarez Borrego addressed this issue at the end of the academic course 1891-92. First of all, he highlighted, “the patient does not usually give importance to the first manifestations of cancer, missing the most favourable conditions for its cure”. Secondly, by the time in which they sought admission into hospital, the anatomical lesion had often spread to the point that “its excision would require a very complex operation that the patients tend to refuse and that, in any case, does not at all guarantee their permanent cure”.[120] These few commentaries on common illness behaviour are suggestive of a gap between medical and lay representations of cancer during the period under analysis, which invites to explore the understanding of malignant growths that the Spanish population at large could possibly possess.

[119] Ibid., 9.
[120] Julio M. Fernández, Rafael S. García, and Felipe M. Ferrer, *Clínica Quirúrgica (2º curso) 1891 a 1892: historias de los casos habidos durante el presente curso* (s.l., s.n., 1892), 114.

CHAPTER 3

POPULAR UNDERSTANDING

I.3.1. An Illiterate and Catholic Majority

Upon noticing a progressive enlargement of her left breast, a young lady who lived in the northwestern city of Vigo in the mid-nineteenth century became "filled with terror at the idea of cancer". So great was her fear that she resolved to seek the advice of a local physician. Following the examination of the mammary organ, the practitioner confirmed her worst suspicions and prescribed a treatment plan consisting in rubbing an ointment of plumbic iodide on the diseased part at least four times a day. As frightened as she was, the lady followed the advice of her doctor "with so much faith … that she kept rubbing her breast at all times". Two months later, however, she had obtained no more results than repeated inflammations, chronic pain in the organ, and a profound disappointment. In search of a second opinion, the woman consulted the surgeon González Olivares, who managed to give her reassurance. As he explained in 1855 in his "Estudios sobre el cáncer" ("Studies on Cancer"), the disease merely "existed in the imagination, not in the breast".[1] The treatment had aggravated a mere inflammation that would have gone naturally. Its interruption led to a complete recovery.

The medical case of the young lady of Vigo demonstrates the variability of signs that existed for producing a cancer diagnosis in mid-nineteenth-century Spain. Moreover, it points to the fact that a surgical excision was not always

[1] José González Olivares, "Estudios sobre el cáncer", *El Siglo Médico* 54 (14th January, 1855): 2.

a practitioner's treatment of choice. Beyond expanding on issues presented in Chapters 1 and 2, the story shows that the Galician woman possessed an idea of cancer *previous* to her first encounter with a doctor. According to González Olivares, then a reputed Professor of Surgery with seven years of specialisation in the area of Obstetrics and Diseases of Women, the disease was particularly prevalent in the northwestern region of the country. In his terms, cancer was "so frequent that, without a shadow of a doubt, it forms the two thirds of the surgical conditions endured in Galicia, with the exception of syphilis and scrofula". [2] That being so, it is very possible that the lady had witnessed a case of cancer illness in the past, or, at least, that she had received a mediated account regarding a third person.

The annual report of the clinical hospitals associated to Spanish faculties of medicine for the academic year 1852-53 backed the figures of the Galician surgeon. Even if the Surgery Clinic of Madrid did not provide exhaustive data on the number of cases of cancer diagnosed and the report of the Medical Clinic of Valencia was missing, the University Hospital of Santiago de Compostela – and especially, its Surgery Clinic – clearly stood out for its degree of malignancy **(Figure 3.1)**.[3] As cancer-related mortality rates progressively increased in the subsequent decades, it became relatively more common for Spanish people to develop an awareness of the condition through the case of a relative, a friend, or an acquaintance. Without a doubt, other diseases remained far more frequent. For instance, in the public dispensaries of the city of Jerez, within the

[2] González Olivares, "Clínica Quirúrgica", 113: 2.

[3] The educational reform of 1845, known as *Plan Pidal,* only gave official recognition to five faculties of medicine in Spain, located in Madrid, Barcelona, Seville, Valencia, and Santiago de Compostela, respectively. Even though article 61 of the new regulation required the professors in charge of each clinic to provide the *Ministerio de Gracia y Justicia* (*Ministry of Grace and Justice*) with an annual report of their activity, it is unlikely that this public institution published a compilation of all these reports year after year; or, if it was the case, this evidence has been lost. The only report of this nature that I have been able to find belongs, as mentioned, to the academic year 1852-53; *Memorias de las clínicas redactadas por los respectivos catedráticos de las universidades de la península, correspondientes al curso clínico próximo pasado* (Madrid: Imprenta del Ministerio de Gracia y Justicia, 1854). At this time, and throughout the rest of the second half of the nineteenth century, the clinical hospitals associated to Spanish Universities followed a triple division into a Medical Clinic (for 'internal' diseases), a Surgery Clinic (for 'external' diseases) and a Clinic of Obstetrics and Diseases of Women and Children (for both 'internal' and 'external' conditions).

province of Cádiz, the most recurrent were digestive troubles, typhoid fevers, rheumatisms, and chronic skin conditions. Still, the most dreaded were phthisis, syphilis, and cancers.[4] The proximity to a single case possibly sufficed to leave an indelible fear in any individual.

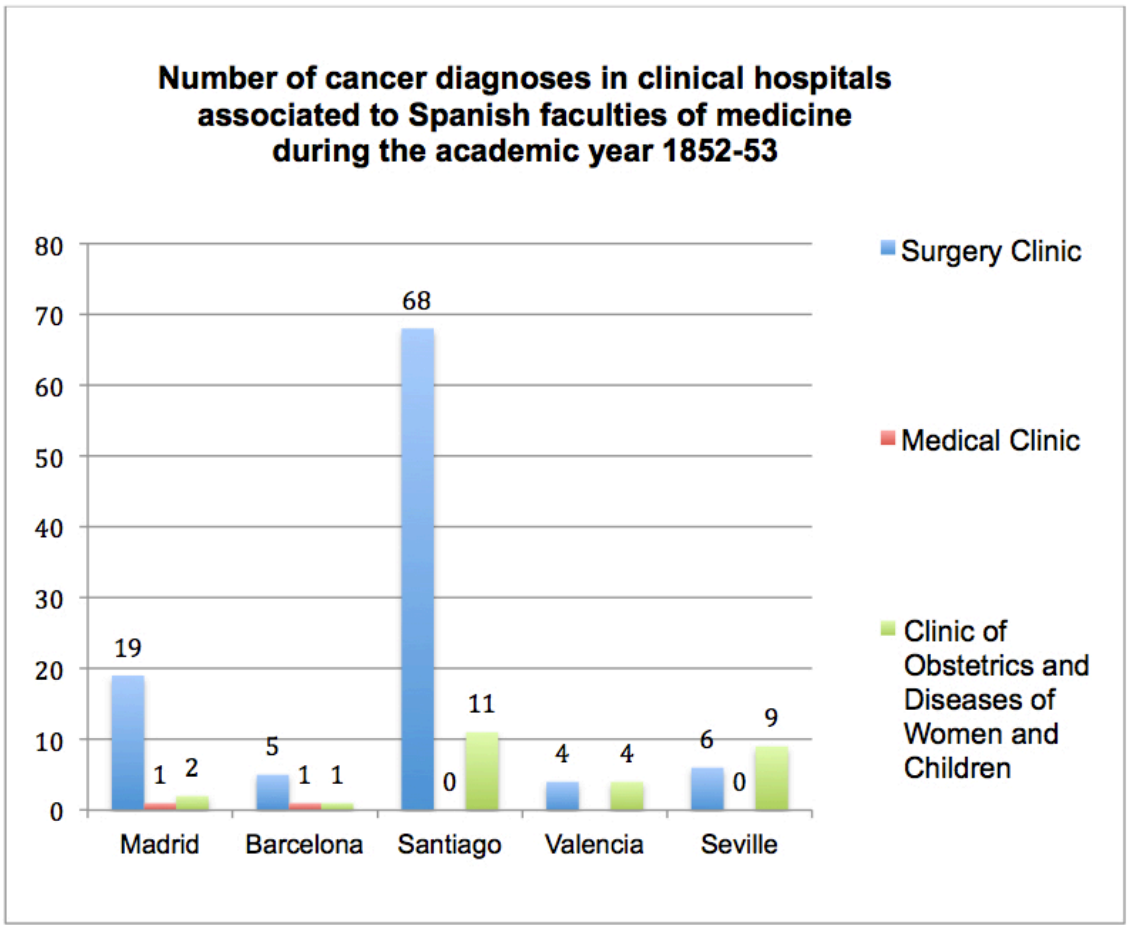

Figure 3.1 Number of cancer diagnoses in clinical hospitals associated to Spanish faculties of medicine during the academic year 1852-53. Elaborated by the thesis author, with data from *Memorias de las clínicas redactadas por los respectivos catedráticos de las universidades de la península, correspondientes al curso clínico próximo pasado* (Madrid: Imprenta del Ministerio de Gracia y Justicia, 1854).

By the year 1900, the proportion of deaths attributed to cancerous conditions in relation to the total number of registered deaths was of 1 out of 74 amongst the Spanish population.[5] Leaving asides the number of deceased children below

[4] Mercedes Benítez Reguera, "Beneficencia y sanidad hospitalaria en Jerez (s. XV-XX)", *Revista de historia de Jerez* 16/17 (2012): 90.

[5] Hans Leyden, *Relación de las investigaciones sobre el cáncer en España,* 11. The total number of deaths of Spanish people in 1900 amounted to 536,716 people. The ratio between this number and the total number of deaths attributed to cancer was exactly of 73.58.

five years old, the ratio nonetheless augmented to 1 out of 42 deaths.[6] Were these data to be homogeneous across and within provinces (notably, between urban and rural areas), it would be reasonable to suggest that, at the time, common folk had significant chances of encountering one or several cases of cancerous illness in their community. Nevertheless, it is also worth considering whether this was the only possible way of acquiring an idea about cancer; or if, on the contrary, a popular understanding of the disease circulated regardless of the proximity to a person who had been diagnosed with a malignant growth. As nearly two thirds of the population were still illiterate at the turn of the century, the question requires taking into account oral, visual, and material means for the dissemination of medical knowledge.[7]

At a time in which the great majority of the Spanish population was unable to read, and virtually everyone followed Catholic principles and practice, the language of religion permeated all aspects of life, including health and illness. As this chapter will show, laypeople's knowledge of cancer also stemmed from the pulpit of the church. On the one hand, Catholic religion had Patron Saints for all sorts of afflictions, and cancer was not an exception. Saint Agatha of Catania, Saint Peregrine Laziosi, and Saint Michael of the Saints were regarded as holy protectors of this specific condition. Through the cult of their figures, Spanish churchgoers learned a number of the salient characteristics of cancer.[8] On the other hand, catholic priests repeatedly

[6] Ministerio de Instrucción Pública y Bellas Artes – Dirección General del Instituto Geográfico y Estadístico, *Movimiento anual de la población de España. Año de 1900. Primera parte,* xxxii. The total number of deaths of children below five years old amounted to 229,348 children, or 42.7 per cent of the total number of deaths in 1900.

[7] Ministerio de Instrucción Pública y Bellas Artes – Dirección General del Instituto Geográfico y Estadístico, *Censo de la población en España. Tomo II. Clasificación de la población de hecho por sexo, estado civil e instrucción elemental* (Madrid: Imprenta de la Dirección General del Instituto Geográfico y Estadístico, 1903): 479. As the Ministry of Public Instruction and Fine Arts reported, in the year 1900, the number of inhabitants of Spain amounted to 18,618,086 people. Amongst these people, 11,874,890 could neither read nor write. In relative terms, 63.8 per cent of the population was illiterate.

[8] The secondary literature on the history of cancer mentions the existence of Patron Saints of cancer in Catholic countries. However, it has focused on laypeople's beliefs in miraculous cures, without paying attention to the more general issue of the ways in which the popular knowledge of these holy figures articulated an idea of the disease. See G.T. Pack, "St. Peregrine, O.S.M. - The Patron Saint of Cancer Patients", *CA: A Cancer Journal for Clinicians* 17(4) (1967): 183-184; Robert Jackson, "St. Peregrine,

referred to moral vice as a cancer of the soul, whether located inside of the individual or at the core of society. This metaphoric use of the term *cancer* was filled with medical semantics. The spiritual condition possessed a distinct symptomatology, prognosis, and therapeutics. In addition to parish sermons, references to moral cancer were present in the conservative press, and in a number of moralising novels and plays.[9]

Overall, the religious idea of cancer drew on the medical knowledge of the disease that preceded its reconceptualisation as a cellular disorder. Whilst the experience of cancer from the perspective of the patient will be properly examined in the second part of this thesis, the present chapter is concerned with the general idea that a significant part of the Spanish population could possess of the condition in the absence of a direct or reported relation with a person who had cancer. With respect to the first-hand experience of illness, the perspective adopted in this chapter is relevant for two reasons. Firstly, it points to the bodily symptoms that laypeople without any previous contact with cancer could possibly associate to this specific condition. As such, it probes into the grounds for developing a suspicion of malignancy. Secondly, it provides an insight into the initial emotional reaction a patient could have when receiving a cancer diagnosis. The first issue contributes to assessing the move from

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O.S.M. Patron Saint of Cancer Patients", *Canadian Medical Association Journal* 111 (1974): 824-827; De Moulin, *Short History of Breast Cancer*, 11-12; Olson, *Bathsheba's Breast*, 22-23; Rui Manuel Pinto Costa, "No trilho histórico do cancro: percepções de incurabilidade, invocações sagradas e rejeição da medicina científica", *Revista de História da Sociedade e da Cultura* 11 (2011): 260-263; Rouëssé, *Histoire du cancer du sein*, 126-127; Hanafi, "Le cancer à travers les consultations épistolaires envoyées au Dr. Tissot",115.

[9] Recent Early Modern scholarship has engaged in exploring the medical semantics in the metaphoric uses of the term *cancer* as a means to access the cultural understanding of the disease. See Michael Stolberg, "Metaphors and Images of Cancer in Early Modern Europe", *Bulletin of the History of Medicine* 88(1) (2014): 48-74; Skuse, *Constructions of Cancer in Early Modern England,* 74-93. Earlier scholarly contributions to the history of cancer showing an interest in literature on social and moral cancer have argued that these images contributed to the creation or reinforcement of laypeople's fear of the disease, but they have not engaged in a detailed analysis of the cluster of medical terms present in the metaphoric uses of the disease label. See Susan Sontag, *Illness as Metaphor* (New York: Picador, 1987); and Ellen Leopold, *Under the Radar: Cancer and the Cold War* (Rutgers University Press, 2009), 8-13. Therefore, this topic of research within the historiography of cancer can be considered as emergent, and it is still unexplored for the second half of the nineteenth century.

separation to *liminality* in the experience of cancer illness, whereas the second relates to liminal existence proper.

I.3.2. On Patron Saints

As the historian David Williams argued in his book *Saints Alive: Word, Image, and Enactment in the Lives of Saints*, the cult of these holy figures generally involved three interrelated genres. The *word* referred to the verbal narrative of their life, or their hagiography; the *image* designated their specific iconographic representation; and the *enactment* was related to the set of ritual practices involved in their cult.[10] Most importantly, these three complementary genres coexisted within the space of the church. Each day in the liturgical year was dedicated to honouring the life and works of a particular Saint or group of Saints. The annual celebration of Saint Agatha of Catania, a virgin martyr of the Early Christendom, took place on 5th February. The life of Saint Peregrine Laziosi, an Italian penitent sinner of the late Middle Ages, was generally remembered every 30th April. The veneration of Saint Michael of the Saints, an Early Modern Catalonian ascetic, usually took place on 5th July.

As one of the earliest martyrs of Christianity, Saint Agatha's example of religious virtue stood amongst the most renowned and widely praised within the Catholic community. She was always named during the Canon of the Mass, or *Canon Missae*, which was a fixed part of the Roman Rite.[11] Furthermore, it was common to find her visual representation in places of worship across the whole country, regardless of the specific religious order in charge of administering the Catholic shrine. The cult of Saint Peregrine and Saint Michael

[10] David Williams, *Saints Alive: Word, Image, and Enactment in the Lives of Saints* (Montreal & Kingston, London, Ithaca: McGill-Queen University Press, 2010). For a study on the emergence of the cult of the Saints in the early Middle Ages, see Peter Brown, *The Cult of the Saints. Its Rise and Function in Latin Christianity* (Chicago: The University of Chicago Press, 1982).

[11] "Diario cristiano", *El Áncora,* 5th February, 1850, 4. It was during the *Second Intercession* of the Canon of the Mass that Agatha was named, along with other nine martyrs of the Early Christendom (Stephen, Ignatius of Antioch, Pope Marcellinus, Perpetua, Felicity, Lucy, Agnes, Cecilia, and Anastasia of Sirmium). This part of the liturgical rite also remembered John the Baptist and the three apostles Matthew, Barnabas, and Peter.

of the Saints, in contrast, was specifically cultivated within the religious orders that these men had joined during their lives; the Servite Order and the Trinitarian Order, respectively. Nevertheless, these two Catholic congregations governed the life of one or several churches located in major Spanish cities, including Madrid, Barcelona, Burgos, Valladolid, Valencia, Seville, Cádiz, Málaga, Cordova, and Majorca. In addition, they were present in smaller cities and towns scattered all around the country.

The annual celebration dedicated to each individual Saint involved a structured programme of events. The series of rituals that formed the *enactment* of the cult began in the morning, with the singing of a solemn service, accompanied by chapel music, and a panegyric discourse that highlighted the glories and virtues of the holy figure. In the afternoon, the faithful gathered in front of the specific Saint's altar to participate in a number of masses seeking the favour and assistance of both the dead and the living members of the community. Whenever a church possessed a relic of the Saint – either human remains or a significant object in his or her life – there was a period of time that was also reserved for its adoration. At the end of the day, the community of believers collectively sang hymns in which the major episodes of the life of the Saint were remembered once again. On some occasions, the celebration was prolonged to a second day.[12]

During the religious ceremony, a number of worshippers also began their daily prayers with a nine-day series of exercises dedicated to each particular Saint, in search of a specific protection or favour. Along with communal and individual prayers, the exercises of the novena typically involved the distribution of alms to the poor, fasting, and the adoration of images of the Saint, especially those that

[12] For the annual celebration of Saint Peregrine Laziosi, see, for instance, "Funciones de Iglesia", *El Áncora,* 29th April, 1854, 5. Regarding Saint Michael of the Saints, see for example "Funciones de Iglesia", *El Áncora,* 4th July, 1853, 5; and also "Sección religiosa – San Miguel de los Santos", *La Dinastía,* 5th July, 1890, 2. A novena dedicated to Saint Agatha that was published in 1860 highlighted that, every 5th February, "the Catholic Church celebrates the feast of the Saint, and remembers her life and martyrdom"; *Novenario en honra de la virgen y mártir Santa Águeda, abogada de todos los que se valen de su patrocinio en cualquier dolencia y trabajo, y en especial de las mujeres en los dolores y enfermedades de sus pechos* (Barcelona: Imprenta de los herederos de la V. Pla, 1860), 4.

were displayed within the space of the church.[13] A novena dedicated to Michael of the Saints that was published in the late-eighteenth century also suggested the use of a metal cilice (a barbed bent worn around the upper leg with the purpose of emulating the Passion of Christ) and the cultivation of internal virtues, such as patiently enduring the annoyance of a relative or a friend, refraining from causing trouble to other people, and the self-denial of any kind of recreation.[14]

The annual *enactment* of the cult of these Saints possessed a regular structure, and systematically honoured a model of Catholic virtue. At the same time, it also celebrated the details of a particular life story. The most significant events in the hagiography of the Saint were retold during the sermons, masses, and collective singing of the hymns. In addition, they were represented in objects aimed at their public display, such as the paintings and polychrome wood sculptures that adorned the space of the churches, as well as in objects aimed at their private consumption, such as holy cards and medallions. Both the *word* and the *image*, in combination, provided the basis for the association of the Saints with one or several specific social concerns. In Modern Spain, Saint Agatha, Saint Peregrine, and Saint Michael of the Saints were considered advocates for multiple causes. In all cases, however, cancer figured as one of the most prevalent motives.

According to the *Golden Legend,* the largest compilation of the lives of saints under the Roman Empire, Saint Agatha was a virgin martyr who lived in Sicily during the first half of the third century under the rule of the provost Quintianus. When this ecclesiastical sovereign became infatuated with the pure and holy young woman, she refused him on the grounds of her commitment to her Lord Jesus Christ. Instead of respecting Agatha's decision, Quintianus tried to break her religious faith, first through the temptation of material possessions, and later

[13] *Novenario en honra de la virgen y mártir Santa Águeda,* 5; *Devoto novenario al Beato Miguel de los Santos, religioso profeso de la Orden de la Santísima Trinidad, Redención de Cautivos, natural de la ciudad de Vich en el Principado de Cataluña, que le consagra la devoción en la Parroquial Iglesia de Santa María del Mar* (Barcelona: Pedro Gomita y Giralt, [ca. 1780]), 7-9.
[14] *Devoto novenario al Beato Miguel de los Santos,* 9.

through her imprisonment in the dark. In view that none of these forms of pressure produced the desired result, he ordered Agatha's torture, including having both breasts cut off. Back in prison, the virgin martyr received the visit of Peter the Apostle. God had sent him to heal her wounds and restore her breasts.

Four days later, the Provost of Sicily sent for Agatha again, with the intention of forcing her to make a sacrifice to the Roman idols. Disbelieving the intercession of Christ in her favour, he finally opted for subjecting her to a second form of torture. This time, the young woman was forced to roll naked under burning brands. As she did it, however, the grounds of the room began to tremble, as in a small earthquake, and a part of the wall fell upon the two counsellors of the Provost. At this point, the population of Catania advised him to leave Agatha alone. Instead of listening to them, Quintianus sent her back to prison. In her cell, the woman prayed for her reunion with Christ. When she finally died, her own wish granted by the Lord, it was with an uncorrupted soul. A year later, a great fire originating in the mountains threatened the city of Catania. On 5th February, which was the date of the anniversary of Agatha's martyrdom, the fire stopped, and the population was saved.[15]

Considering the details of Saint Agatha's hagiography, a Spanish novena published in 1860 stated that "the faithful recognise and venerate her as a special advocate for women in the diseases and pains of their breasts, but very few of them know her closeness to God in relation to other serious evils, misfortunes, and adversities, specially against fires, discharges of blood, earthquakes, and fighting against the demon".[16] The oral transmission of the story of this virgin martyr focused on the episode of the amputation of her breasts in the name of her Christian faith. Other episodes of her life and works were usually disregarded. Along the same line, the specialist in folk medicine Antonio Castillo de Lucas recounted that "the women who commend themselves to *Santa Águeda* are those who suffer from *zaratanes* [a Spanish synonym for cancer, specially when it occurred in the mammary organs] and

[15] Jacobus de Voragine, *The Golden Legend, or Lives of the Saints,* Vol.3, trans. Lat. William Caxton (London: J.M. Dent & Sons, 1900), 32-39.
[16] *Novenario en honra de la virgen y mártir Santa Águeda,* 3.

from ‘hairs in the breast’ (puerperal mastitis); and, as a remembrance of gratitude, they add a votive offering to their prayers”.[17]

Figure 3.2 (upper left) Workshop of the Cabanes’ family, *Santa Águeda,* cornice of the Main Altarpiece of the Church of *Sant Feliu*, c. 1494-1505, tempera and oil on board, Játiva, Valencia, Spain. Reproduced in Lucía González Menéndez coord., *Restauració del Retaule Major de l’Església de Sant Feliu de Xàtiva,* Recuperem Patrimoni, 8 (Valencia: Generalitat Valenciana, 2005), 67. **Figure 3.3 (lower left)** Luis Tristán, *Santa Águeda*, predella of the altarpiece on the Life of Christ of the Parish Church of *San Benito Abad*, 1616, 42 x 40 cm, Yepes, Toledo, Spain. Reproduced with permission of the Parish Church of *San Benito Abad*. **Figure 3.4 (right)** Unknown Spanish artist, *Santa Águeda*, late 16th century, polychrome carved wood, Parish Church of *Santa Águeda,* Sorihuela del Guadalimar, Jaén, Spain. Photographed by Manuel Jesús López.

[17] Antonio Castillo de Lucas, *Folkmedicina* (Madrid: Dossat, 1958). Quoted in Joaquín Díaz, “El seno femenino en la cultura tradicional”, *Revista de Folklore* 319 (2007): 34. The term *zaratán* was adapted from the Arabic term سرطان (pronounced *saraṭān*), meaning a malignant tumour. On this issue, see Eloísa Llavero Ruiz, “La cirugía árabe y el cáncer: definiciones y tratamientos”, *Dynamis* 21 (2001): 143-144.

Since the late Middle Ages, the iconographic representation of the virgin martyr – whom the Spanish population knew both as *Santa Ágata* and *Santa Águeda* – also concentrated on the loss and restoration of her female organs.[18] She was customarily portrayed with four breasts. The first pair were in their usual place within the female chest, their shape discernible under the garments that covered her, whilst she carried the second pair in a silver platter that she held with one hand. In her other hand, she often held a palm branch, a common symbol of martyrdom that represented the triumph of the spirit over the flesh **(Figures 3.2 to 3.4)**. In addition, other paintings represented the scene of the amputation of her breasts **(Figure 3.5)**.

Figure 3.5 Gaspar de Palencia, *Martirio de Santa Águeda*, ca. 1575-1600, oil on board, 59 x 46 cm, Museo de Bellas Artes de Bilbao, Spain. Reproduced with permission of © Bilboko Arte Ederren Museoa - Museo de Bellas Artes de Bilbao.

[18] Olson, *Bathsheba's Breast*, 23-24.

Agatha of Catania was considered the Patron Saint of all sorts of women's complaints regarding their breasts, whether their nature was tumorous, inflammatory, or of any other kind. Her connection with cancer was nonetheless particularly enduring. In his *History of the Radical Mastectomy,* the US surgeon and amateur historian William A. Cooper pointed to the analogy between Agatha's torture and the surgical practice of the mastectomy as the underlying reason for this privileged bond.[19] Though he did not develop this idea, a number of arguments support it. Firstly, at the time in which Agatha of Catania lived, the amputation of a cancerous breast was already part of the catalogue of surgical procedures. The Greek physician Leonidas (2nd – 3rd centuries) is credited as the first practitioner who described this operation, which began with a knife incision in the upper part of the breast (above the cancer), immediately followed by a cauterisation of the wound to prevent an abundant haemorrhage. Without any further precaution, the cutting-burning procedure was repeated until the organ was completely removed.[20]

A second argument concerns the anachronistic presence of Modern surgical instruments used for mastectomies in representations of the virgin martyr. For instance, in the seventeenth century, the Düsseldorf surgeon Wilhelm Fabry designed a forceps that allowed the base of the breast to be squeezed, with the purpose of facilitating the movements of the knife **(Figure 3.6)**.[21] A similar instrument can be found in a contemporary engraving of Saint Agatha **(Figure 3.7)**. The third argument inverses the second: instead of depicting a cure, Modern Western European engravings of mastectomies presented the surgical procedure as a form of torture. In the works of two seventeenth-century Dutch artists represented below, a number of details are revealing. Firstly, and most clearly, the ordeal is manifest in the facial expression and the gesture of the

[19] William A. Cooper, "The History of the Radical Mastectomy", *Annals of Medical History* 3(36) (1941): 39.
[20] Aetius of Amida, *Gynaecology and Obstetrics,* 50. Following Jacob Wolff's work on *The Science of Cancerous Disease From Earliest Times to the Present* (originally published in 1907), intellectual historians of cancer have considered Leonidas' description of a mastectomy (mentioned, first, by Aetius and, a century later, by Paul of Aegina) as the earliest known example of the existence of such a procedure. See Cooper, "History of the Radical Mastectomy", 38; Shimkin, *Contrary to nature*, 33; De Moulin, *Short History of Breast Cancer,* 5-6.
[21] Olson, *Bathsheba's Breast,* 33.

patient herself. Secondly, the surgeon who is using the forceps has a threatening appearance, with his furrowed brow and his crooked mouth. Thirdly, one or several men grab the back of the patient in case she vanishes or tries to put up any resistance against the practitioner. Finally, the remaining spectators of the scene show clear signs of uneasiness. Some of them gaze sadly at her, whilst others look away and sob or cover their ears **(Figures 3.8 and 3.9).**

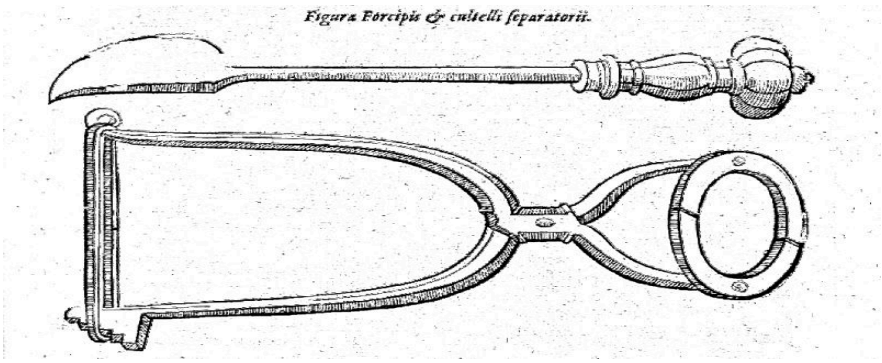

Figure 3.6 (above) Wilhelm Fabry, "Forcipis & cultelli separatorii", 1682. Drawing extracted from Wilhelm Fabry, *Opera observationum et curationum medico-chirurgicarum, quae existant omnia* (Frankfurt: J.L. Dufour, 1682), 151. **Figure 3.7 (below)** Unknown artist, *Saint Agatha,* 17th century. Engraving reproduced in Knut Haeger, *The Illustrated History of Surgery* (London: Starke cop., 1988), 235.

Figure 3.8 Unknown Dutch artist, *Mastectomy,* 17th century, drawing, 9.9 x 12.8 cm, Wellcome Collection (528470i), London, United Kingdom. Licensed under CCBY 4.0

Figure 3.9 Romeyn de Hooghe, *Mastectomy,* 1667. Drawing reproduced in De Moulin, *Short History of Breast Cancer*, 28.

The analogy between the experience of Saint Agatha and the women who endured a mastectomy was also present in late-nineteenth-century Spain. In 1880, a compilation of poems by the writer Juan Francisco López del Plano included a composition titled "A un operador de zaratanes" ("To an Operator of *Zaratanes*"), in which all women who had lost a breast in the hands of the surgeon were characterised as "a sad Saint Agatha". Furthermore, the poet adopted the standpoint of these women in presenting them as victims of a "surgical executioner" and a "horrendous *breasticide*" ("teticida", in the Spanish text). Besides the dread of surgical pain, López del Plano suggested that women feared mastectomies because it led to the loss of their femininity. In this respect, he referred to them as the "fairer sex" and described their breasts as "beautiful apples" ("bellas pomas") that should rather be augmented in size than removed. Finally, the poet pointed to the risks that a woman's morality could face if she underwent a mastectomy, especially if a lecherous surgeon behaved with "impiety".[22]

In Spain, the association between Saint Agatha and breast cancer dated back at least to the Early Modern period. During the eighteenth century, the Hospital of *San Antonio Abad,* in Madrid*,* reserved a ward for women who had *zaratán,* which was revealingly named *Santa Águeda* after the virgin martyr.[23] The hospital closed in 1787, but the relationship between the Saint and cancer transcended this particular space. Moreover, it persisted at the turn of the nineteenth century. According to the views of a contributor to the satirical newspaper *El Motín*, the religious faith of Spanish people had by no means diminished, and they still associated every calamity, every organ of the body, and every disease with a holy figure. Along with Patron Saints of conditions such as apoplexy (or stroke), vertigo, rheumatism, paralysis, haemorrhages, colic, cholera, whitlow, and chilblains, Saint Agatha continued to find her place as the "specialist saint" of the "*zaratanes"*.[24]

[22] Juan Francisco López del Plano, "A un operador de zaratanes", in *Poesías selectas* (Zaragoza: Imprenta del Hospicio Provincial, 1880), 376.
[23] Josef Antonio Álvarez y Baena, *Compendio histórico de las grandezas de la coronada villa de Madrid, corte de la monarquía de España* (Madrid: Don Antonio de Sancha, 1786). See also Díaz, "El seno femenino en la cultura tradicional", 34.
[24] Alfredo Calderón, "Milagros", *El Motín,* 14th September, 1901, 1.

Overall, the cult of Saint Agatha in Modern Spain suggests that breast cancer was a known disease outside of the medical community. Furthermore, the practice of the mastectomy was also known and feared, not just on physical grounds, but for social and moral reasons as well. The surgical amputation of the breast was even associated to Christian martyrdom. At the same time, common folk believed that they could obtain a miraculous cure for cancer through the supernatural intercession of this saint, an issue that will be considered further in Chapter 5. With respect to the laypeople's idea of the disease, Saint Agatha was in al likeliness the oldest Patron Saint of cancer. But she was certainly not the only one. For very different reasons, Saint Peregrine Laziosi was also considered a special advocate for people with cancer in Modern Spain.

Peregrine was born in the Italian region of Romagna in the mid-thirteenth century. His early youth, in contrast to Agatha's, far from constituted a model of virtue. Known as an ardent Ghibelline (a partisan of the antipapal faction, opposed to the Guelphs), he led the resistance against the authority of Pope Martin IV in the battle of Forlì that took place in 1282. Eventually, he gained victory for his side after punching the Pope's envoy, Philip Benizi, in the face. This event was to become the turning point in Peregrine's life. Honouring his reputation as a person of profound sanctity, Benizi decided to forgive the young man and prayed for him. Peregrine was so deeply struck by this reaction that he begged Benizi's pardon and put his life at the service of God and the Catholic Church. Following a vision of the Virgin Mary, he travelled to Siena to enter the convent of the Order of the Servites and begin a life as preacher, charitable man, and penitent. In this regard, he became best known for a mortification practice consisting in never lying in bed.[25]

After many decades of leading a virtuous life, Peregrine developed a disease that "caused a decaying and strange swelling of his shin, that which they call

[25] Camille M. Saint-Germain, *Saint Pérégrin de l'Ordre des Servites de Marie: le Saint du cancer* (Montréal: Éditions Paulines & Médiaspaul, 1986 [1953]), 11-31. See also Pack, *St. Peregrine, O.S.M,* 183-184.

cancer".[26] The description that the hagiographer Nicolao Burgensio provided in the fifteenth century was consistent with the medical understanding of the cancerous ulcer that existed in late-medieval Italy, as outlined in Chapter 1. Just like in the descriptions of the aggressive course of *herpes esthiomenos* and *lupus,* the malignant condition in Peregrine's leg spread quickly inside the flesh and attacked his bone, forcing the pious man to remain immobile on a couch. Finally, Peregrine consented to the visit of a doctor, though he allegedly did so only to please the Fathers of the convent and a number of friends.

The prognosis was clear: if Peregrine wanted to try escaping from a premature death, the diseased leg had to be amputated as soon as possible. So great was the urgency that the operation was set for the following morning. During the night, Peregrine was unable to sleep. As his hagiographers have detailed, he was in pain, but his major discomfort came from the fact that he was lying in a bed. At some point, Peregrine decided to walk down the stairs to the convent chapter and pray for his cure in front of a representation of the Calvary cross. Even if he accepted the fate of losing his leg with resignation, he could hardly bear the thought of limiting his ability to help the poor and the sick. When he finally fell asleep, he dreamt of Christ liberating his hands from the wooden cross to touch his diseased member. Upon awakening, the pain had ceased and the cancerous ulcer had disappeared.[27]

During the last few years of his life, Peregrine became known as *the new Job*. The alias referred to the character in the Old Testament who endured several physical torments to demonstrate the purity of his Christian faith. Despite all the temptations that the Devil sent to him, Job never abhorred God. According to many commentators, he even lived with the symptoms historically associated to leprosy. Similarly, Peregrine endured cancer with resignation, and only prayed for his cure with the altruistic motivation of being able to continue assisting other people in their illnesses and other misfortunes. In 1862, a Spanish panegyric to Saint Peregrine insisted in the connection between the two characters through

[26] Nicolao Burgensio, "Vita beati Peregrini Foroliviensis Ordinis Servorum sanctae Mariae", in *Monumenta OSM,* Vol. 4, 1484, 58-62. Quoted in Jackson, *St. Peregrine O.S.M.,* 824.
[27] Saint-Germain, *Saint Pérégrin de l'Ordre des Servites de Marie,* 33-71.

a recreation of the impressions that the man's attitude towards his illness had provoked in his community:

> Some [people] said: "Laziosi is a new Job, as he devotes himself to great works with immutable patience". Others added: "Yes, he is a new Job. The joy shining in his face in spite of the outrageous tribulations that afflict him demonstrate it well." All said: "He is a new Job", and they concluded with those words of Tobias: "God has allowed this temptation to exist to teach us a new example of patience, just like he deigned give it to our predecessors through the person of Saint Job.[28]

The episode is revealing of the model of behaviour that was expected of Catholic believers in adverse circumstances, including sufferings as severe as those that cancer pain could cause.

Even so, it is reasonable to assume that the connection between these two diseases, *cancer* and *leprosy,* had to be more specific. Otherwise, any holy figure having developed an incurable and painful condition without doubting their faith in the Lord would have qualified for the designation of *new Job*. In all likelihood, the analogy drew on the pervasive medieval assertion that "leprosy is a cancer of the whole body", originally attributed to Avicenna, a Persian physician of the eleventh century.[29] Following the translation of his *Canon*

[28] Ramón Buldú, coord., *Tesoro de panegíricos, o sea biblioteca escogida de discursos en honor de los santos cuyo culto es más popular y universal en el seno de nuestra señora madre la Iglesia Católica. Colección la más moderna y acomodada a las actuales necesidades de la época, formada con materiales sacados de los oradores contemporáneos más distinguidos, con producciones originales,* Vol. 3 (Barcelona: Librería Católica de Pons y Compañía, 1862), 278.

[29] Demaître, "Medieval Notions of Cancer", 609. Avicenna's statement did not emerge out of the blue. Physicians from earlier centuries had linked cancer to a condition known as *elephantiasis* since Roman Antiquity, and renamed as *lepra* in the High Middle Ages. Most significantly, in the seventh century, the Byzantine medical authority Paul of Aegina already stated: "For if cancer, which, as it were, an elephantiasis in a particular part, is ranked amongst the incurable diseases by Hippocrates himself, how much more is not elephantiasis incurable, which is, as it were, a cancer of the whole body?"; Aegina, *The Seven Books of Paulus Aegineta,* Vol. 2, 1. To make his claim, this medical authority of the early Middle Ages drew on the Aphorism 38 of the Hippocratic Corpus (mentioned in Chapter 2) but also on Galen's views on cancer and elephantiasis. According to Galen's treatise *On Tumours Against Nature,* both were diseases of black bile; Reedy, "Galen on Cancer and Related Diseases", 236. Furthermore, in Galen's work *A Method of Medicine to Glaucon,* their treatment was addressed together in a same section; Galen, "Method of Medicine", 548-558. For more details on this issue, see Luke Demaître, *Leprosy in Pre-Modern Medicine: A*

Medicinae to Latin*,* the idea became common knowledge in late-medieval medical representations of leprosy. The references to Avicenna's statement were so numerous that Luke Demaître, a US historian of medieval leprosy, claimed: "one cannot hope to comprehend medieval views of leprosy … without having a sense of early notions of cancer".[30] Beyond medical theory, the idea that cancer was a type of leprosy that only affected a specific part of the body served to inform public policies that admitted those kinds of patients into leper houses.[31] Hence, there can be little doubt that it was primarily on this basis that Peregrine was considered to be a new Job.

The iconography of Saint Peregrine Laziosi focused neither on his early years nor on his decades of work as a charitable man, but on the episodes of his illness and miraculous cure. Two symbols allowed the population to recognise the holy figure: on the one hand, his diseased leg, which his religious habit always left visible; on the other hand, the wooden Calvary cross in front of which he had prayed for his cure **(Figure 3.10)**. Other representations also focused on the moment in which Christ healed his wound **(Figure 3.11)**. During the ceremony for the canonisation of Peregrine Laziosi, which took place in 1726, Pope Benedict XIII officially declared the holy figure as a Patron Saint of cancer.[32] Through his cult, Spaniards learned that the disease could manifest itself as a painful primary ulcer, whose cure depended either on the remote success of a major surgical operation or on a divine intercession. In addition, the association between cancer and leprosy persisted in time, as will be considered further in Chapter 4.

Malady of the Whole Body (Baltimore, MD: The John Hopkins University Press, 2007), 17, 115-118 and 189-191.

[30] Demaître, "Medieval Notions of Cancer", 609.

[31] For the case of Spain, see Fanny H. Brotons, 25th September 2014, entry "The Religious Roots of Cancerphobia", *The History of Emotions Blog* (Queen Mary University of London), accessed 29th July 2017, https://emotionsblog.history.qmul.ac.uk/2014/09/the-religious-roots-of-cancerphobia/

[32] Saint-Germain, *Saint Pérégrin de l'Ordre des Servites de Marie,* 9. Pope Benedict XIII's speech for the canonisation of Peregrine Laziosi specifically referred to his condition as "gangraena". In addition, the ecclesiastic ruler also defined the disease as a "mortifero tumore" ("deadly tumour"), thus clarifying that the illness Peregrine suffered from was cancer; Benedict XIII, "Sanctorum confessorum canoni adscribit Beatum Peregrinum Latiosum a Foro Livii, in Aemilia, ordinis Fratrum Servorum beatae Mariae Virginis qui obit die I. Maji A.D. 1345", in *Codex constitutionum quas Summi Pontifices ediderunt in solemni canonizatione sanctorum a Johanne XV, ad Benedictum XIII,* ed. Justo Fontano (Rome: Ex Typographia Reverendae Camerae Apostolicae, 1729), 596.

Figure 3.10 (left) Unknown Genoese artist, *Saint Peregrine Laziosi,* 1774, polychrome carved wood, Church of *San Lorenzo Mártir,* Cádiz, Spain. Photographed by Carlos Fernández Barbudo. **Figure 3.11 (right) Medallion representing the Virgin of the Seven Sorrows (obverse) and Saint Peregrine Laziosi being healed by Christ on the Cross (reverse), 1856**, bronze, ø 2 cm, Order of the Servites of the Virgin Mary, Spain. Photographed by Fanny H. Brotons.

Besides Saint Peregrine and Saint Agatha, a third holy figure – Saint Michael of the Saints – became associated with cancer in Modern Spain. During the 1890s, the annual festivity that the Trinitarian Order celebrated in Vich, his Catalonian hometown, was routinely said to be in honour of an "advocate against cancerous tumours".[33] At around the same time, several devotional items insisted in this connection. The Church of *Sant Jaume,* in Barcelona, issued a holy card with an inscription in Catalan that read: "Saint Michael of the

[33] "Sección religiosa – San Miguel de los Santos", 2; "Crónica local. La pía unión de San Miguel de los Santos", *La Dinastía,* 3rd July 1895, 2; "Crónica local. La pía unión de San Miguel de los Santos", *La Dinastía,* 5th July 1898, 2.

Saints. Who is venerated in the Parish Church of *Sant Jaume* of Barcelona. Advocate for labour, tumours, and cancer" **(Figure 3.12)**. In addition, a medallion with a similar representation of the Saint also specified, on its reverse, that Saint Michael was considered the "advocate against the fevers, phthisis, and cancer" **(Figure 3.13)**.

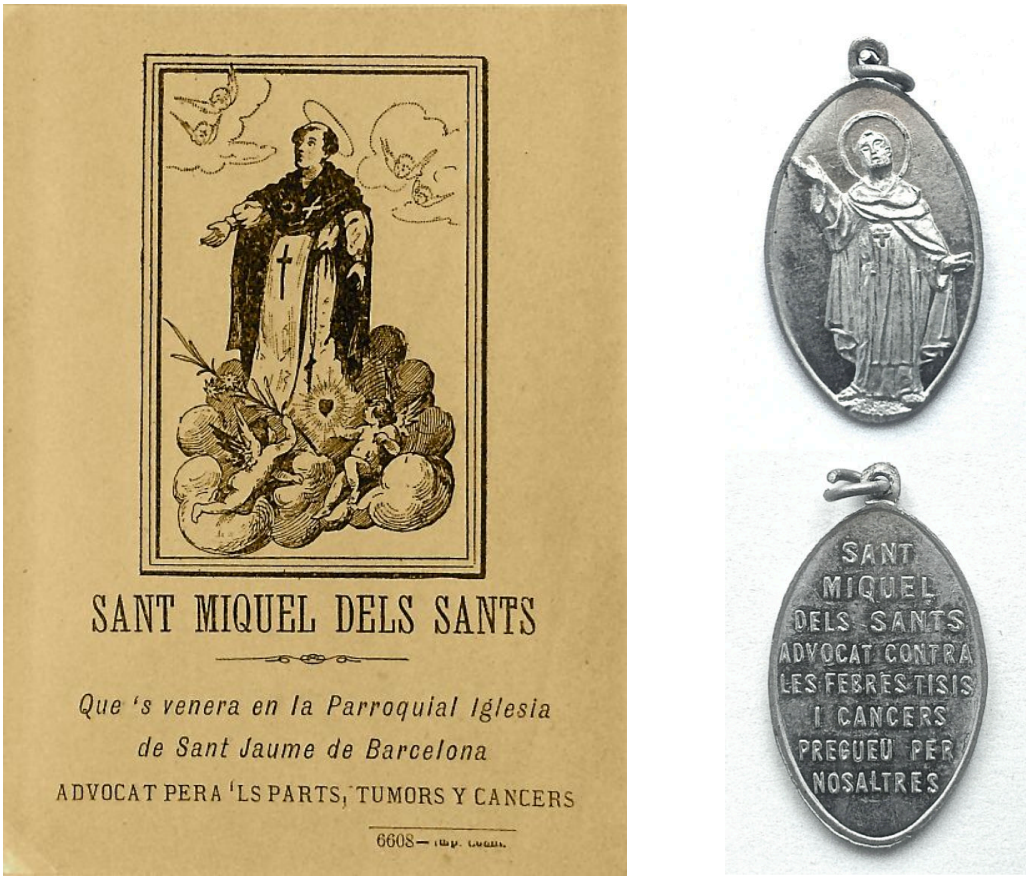

Figure 3.12 (left) Holy card of Saint Michael of the Saints, ca. 1890, engraving, 10,7 x 7,8 cm, Trinitarian Order, Parish church of *Sant Jaume,* Barcelona, Spain. Photographed by Fanny H. Brotons. **Figure 3.13 (right)** Medallion of Saint Michael of the Saints, ca. 1890-1930, 2,8 x 1,8 cm, Trinitarian Order, Vich, Barcelona, Spain. Photographed by Fanny H. Brotons.

Just like his predecessors, Saint Michael of the Saints had multiple patronages, but his connexion with cancer was one of the most salient. Unlike Saint Agatha and Saint Peregrine, however, the most common representation of his figure did not involve a mutilated body. Instead, it showed a man fully dressed in the habit of his religious order with the symbol of the Trinitarian Cross. His head was crowned by an aura, and his face turned towards the Lord (either imagined in the sky or represented by a Holy Cross). An iris branch of iris as a floral sign of

his purity would be present, and so would the sacred heart of Christ – received in exchange of his own – as evidence of the mystic affinity that existed between them.

Born at the end of the sixteenth century as Miguel Argemir, the pious man did not gain his reputation as Patron Saint of cancer through martyrdom, like the virgin of Catania, nor through penance for past sins, as the convert Ghibelline, but through the certification of his heroic virtues.[34] As such, his patronages were not related to the degradation of his own flesh, but to the instantaneous and perfect healing of other people's diseased bodies, including several cases of cancer, phthisis, and fevers, along with the resuscitation of a baby, and other cases of blindness, epilepsy, and fractures.[35] In the processes of both his beatification and his canonisation, the Sacred Congregation of Rites selected and certified the miraculous cure of an individual with cancer obtained through his intercession from the afterlife, in a process that involved witnesses and doctors.[36] It was through the dissemination of this news that people came to know him as a Patron Saint of cancer.

The Pope Pius IX decreed Michael's sanctity in September 1861. Given that the new Saint had Spanish origins, the religious festivities that accompanied this event in his home country were particularly enthusiastic, with the major episodes of his life and works repeated time and again amongst the community of believers. Along with other anecdotes, the story took them back to the late-eighteenth century, which was the time of the certification of the two miracles proposed for his beatification. According to the narrative, he was responsible for

[34] Fray Luis de San Diego, *Compendio de la vida del beato Fr. Miguel de los Santos, religioso de la descalcez del sagrado orden de la Santísima Trinidad, redención de cautivos* (Madrid: Oficina de D. Manuel Martín, 1779).

[35] Anselmo de San Luis Gonzaga, *Vida de San Miguel de los Santos de la Orden de Trinitarios Descalzos, en vista del proceso de canonización y expresamente para esta solemnidad,* trans. It. Carlos Soler y Arqués (Vich: Imprenta y Librería de Soler, 1862), 178-198.

[36] For a review of the ecclesiastical investigations in order to certify miracles and canonise Saints during the late Middle Ages, see Joseph Ziegler, "Practitioners and Saints: Medical Men in Canonization Processes in the Thirteenth to Fifteenth Centuries", *Social History of Medicine* 12(2) (1999): 191-225. For a general study of these processes since the late-seventeenth century, see Jacalyn Duffin, *Medical Miracles: Doctors, Saints, and Healing in the Modern World* (Oxford: Oxford University Press, 2009). As this scholar stressed, in page 87, "[m]iracle cures of cancer and tumours are present in all eras and comprise a significant proportion of the whole".

the instantaneous and perfect cure of a man with a broken arm, and he also achieved the immediate and complete healing of María Gil, a woman from Valladolid who had a tumour in the left breast that presented "all the characteristic symptoms of a perfect cancer";[37] that is, an unexpected growth, accompanied by pain, resistant to therapeutic means, and leading slowly to death.[38] The miracle was said to have occurred after the diseased breast was exposed to a tissue stained with the blood of the virtuous Michael.[39]

Some decades later, the same characteristics appeared in a cancer of the tongue that afflicted a woman named Francisca Navarrete. At the time of the miraculous intercession of Michael of the Saints, the lady was already deemed more dead than alive. In October 1861, a contributor to the newspaper *La Esperanza* described the course of her illness in the following terms:

> Francisca Navarrete y Sanz, aged sixty-one, had been tormented for ten years by an ulcerated cancerous tumour on the lower part of the tongue, which had grown extraordinarily, to the point that it not only filled the entire space of her mouth, but even stood out of her lower lip, causing such a deformity to her face that she was ashamed of showing herself in public. Additionally, she could eat no solids, and in order to stay alive, she had to nourish herself only through liquids. The wretched woman was abandoned in this deplorable state, with physicians considering her as a lost cause, and almost dead.[40]

As ill as she was, and in spite of the physicians' pessimism, the woman did not give up all hope of recovery. On the contrary, she began a novena to Michael of the Saints in the Trinitarian Church of Granada. If the Blessed Michael cured her, she promised to wear the habit of the Trinitarian Order and to dedicate the rest of her life to the distribution of alms to the poor.[41] Her restoration to health, along with the miraculous cure of a man with advanced phthisis, formed the basis for the canonisation of Michael of the Saints.[42]

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[37] "Breve compendio histórico de la vida del Beato Miguel de los Santos, religioso del orden de descalzos de la Santísima Trinidad, Redención de cautivos", *La Esperanza,* 22th October, 1861, 3.
[38] De San Diego, *Compendio de la vida del beato Fr. Miguel de los Santos*, 347.
[39] De San Luis Gonzaga, *Vida de San Miguel de los Santos,* 190.
[40] *Breve compendio histórico de la vida del Beato Miguel de los Santos*, 25.
[41] De San Luis Gonzaga, Vida de San Miguel de los Santos, 192-205.
[42] Ibid., 3.

Through the reiterated narration of these miracles, the Spanish Catholic community was repeatedly reminded of the existence of a disease named cancer. What is more, they confronted its most salient features, which corresponded to the traditional idea of the *malignant course* of external cancers. More broadly, the religious iconography of the three Patron Saints of cancer, accompanied with the oral instruction of their lives and work, was possibly the most widespread means through which the population learned what cancer was, and which were its characteristic signs, asides from a direct or mediated encounter with a sick person. This knowledge, which portrayed a dreadful disease, was further enriched and modulated with the semantics used in diverse media – such as the pulpit of the Church, catholic newspapers, and moralising literature – for describing a *spiritual* form of cancer.

I.3.3. On Chastised Sinners

In the original Greek text of the *New Testament,* the verse 2:17 of the "Second letter of St. Paul to Timothy" referred to ungodly words spreading like *γάγγραινα* (pronounced *gaggraina*). The term derived from the verb *γραίνειν* (*grainein*, "to gnaw") and meant "an eating, spreading sore".[43] The Latin canonical version of the Bible, known as the *Vulgate,* rendered the term *γάγγραινα* into *gangraena.*[44] From the late Middle Ages to the Protestant Reformation, criticism to the authority of the Catholic Church fostered new translations of the Bible in Western European countries, into either Latin or vernacular languages. By this time, the term *gangraena* had evolved into the form *cancrena*, which was phonetically close to the Latin words *cancro* and *cancer*, also used to designate incurable spreading ulcers, as seen in Chapter 1. Hence, *cancer* was the term

[43] James Hastings, "Entry for 'Gangrene'", *Hasting's Dictionary of the New Testament,* 1906-18*,* accessed 29th July 2017, http://www.studylight.org/dictionaries/hdn/g/gangrene.html

[44] Even if there were different versions of the *Vulgate,* I am assuming that the use of the Latin term *gangraena* remained unaltered across the centuries. I base this assumption on two observations. Firstly, it was the term used in the version of the *Vulgate* by Theodore Beza, *Iesu Christi Domini Nostri Novum Testamentum* (Geneva: Haered E. Vignon, 1598 [1565]), II 368. Secondly, it was also the term maintained in John Calvin, *Commentaries on the Epistles to Timothy, Titus, and Philemon*, trans. Lat. (1556) Reverend William Pringle (Edinburgh: Calvin Translation Society, 1856), 219.

of choice in a number of these new translations of verse 2:17.[45] In the late-fourteenth century, successive editions of the Wycliffe's Bible used this term in its Middle English orthographies "kankir" and "canker". In the first half of the sixteenth century, Erasmus of Rotterdam referred to a "cancer morbus" and Martin Luther opted for the German word "Krebs".[46] Later in the century, Theodore Beza and Casiodoro de Reina – French and Spanish Protestants, respectively – also used the word "cancer".[47]

Through these successive translations of a same Biblical verse, the term *cancer* – in its late-medieval and Renaissance medical signification – entered the realm of Biblical diseases. From then on, Western European writers began to use it symbolically, to characterise the way in which immoral behaviour consumed the souls of the individuals and destroyed the spiritual health of the social body. As the French historian Jacques Le Brun has explained in his article "*Cancer serpit*: recherches sur la représentation du cancer dans les biographies spirituelles féminines du XVIIe siècle" ("*Cancer serpit*: The Social Representation of Cancer in 17th Century Women Spiritual Biographies"), owing to the presence of the disease label in the New Testament, "moralists could compare the proliferation of vices to the spreading of cancer … The moral evil becomes a 'cancer' just like, in earlier periods, it appeared as a 'plague' or as a 'leprosy'".[48]

The historiography of cancer includes a number of examples of these symbolic uses during the Renaissance and the Early Modern period. To begin with, Lebrun himself found that, in the 1630s, the French religious dignitary Jean

[45] In the vernacular version of the Bible that Cipriano de Valera published at the turn of the sixteenth century, this Spanish Protestant included a footnote for explaining that *cancer* was the term that best conveyed the sense of *gangraena;* that is, "a spreading and incurable disease beginning with a sudden inflammation"; Cipriano de Valera, *La Biblia, que es los sacros libros del Viejo y Nuevo Testamento* (Amsterdam: Lorenzo Iacobi, 1602), sheet 72.

[46] Erasmus, *Novum Testamentum* (Basel: Johann Froben, 1516), 461; Martin Luther, *Biblia: Das ist, Die gantze Heilige Schrift. Deudsch auffs new zugericht* (Wittenberg: Hans Lufft, 1545).

[47] Casiodoro de Reina, *La Biblia, que es los sacros libros del Viejo y Nuevo Testamento* (Basel: T. Guarinus,1569), 416; Beza, *Iesu Christi Domini Nostri Novum Testamentum,* II 368.

[48] Jacques Lebrun, "Cancer serpit. Recherches sur la représentation du cancer dans les biographies spirituelles féminines du XVIIe siècle", *Sciences Sociales et Santé* 2(2) (1984): 29-30.

Polman compared the immodest enlargement of women's neckline with the propagation of a cancer, and the Dutch Jesuit theologian Maximilian van der Sandt referred to the words of the heretics spreading like cancer.[49] Added to this, in her book *Illness as Metaphor*, Susan Sontag mentioned the mid-sixteenth-century English writer Thomas Palfreyman pointing to "that pestilent and most infectious canker, idlenesse [sic]". She also quoted the Anglican Bishop Thomas Ken in his epic poem *Edmund*. In 1711, this clergyman denounced: "Sloth is a Cancer, eating up that Time Princes should cultivate for Things sublime".[50] Still more, Darmon stressed that, at around the same time, the French Duke of Saint-Simon defined the passion of gambling as a "cancer eating into private individuals".[51]

By the mid-nineteenth century, the symbolic use of the term *cancer* had become relatively common in Western Europe, including Spain. The forms of spiritual corruption comprised attitudes like ambition, greed, vanity, ostentation, selfishness, envy, pride, idleness, sensualism, adultery, prostitution, usury, criminality, banditry, and, as an overall category, religious indifferentism. The consequences of such vicious behaviour were first considered at the individual scale. However, they were also connected to the degradation of society as a whole, thus standing as contributions to the literary theme of the *social cancer.* Even if the moral disease attacked the *soul* or *spirit* of the individuals instead of their *flesh,* the semantics associated to the uses of the word *cancer* matched a number of characteristic signs of the condition as physicians and surgeons described them. Religion and medicine met in what the writer Antonio R. López del Arco defined, in his late-nineteenth-century novel *Cáncer social,* as "the symptomatic picture of the laxity of manners".[52] Thus, the exploration of this vocabulary provides a valuable means for approaching with greater precision

[49] Jean Polman, *Le chancre ou couvre-sein féminin* (Douay, 1635), 7-8; Maximilan van der Sandt, *Theologia medica seu commentationes de Medicis, Morbis et Medicinis Evangelicis* (Cologne, 1637), I.1 249-257 and I.2 208. Both works are referenced in Lebrun, "Cancer serpit", 30.
[50] Sontag, *Illness as Metaphor,* 14. Sontag herself found this reference in the Oxford English Dictionary (from now on, OED).
[51] Quoted in Darmon, *Cellules folles*, 106.
[52] Antonio R. López del Arco, *Cáncer social* (Talavera de la Reina: Imprenta de Luis Rubalcaba, 1893), vi.

the understanding of cancer that Spanish people could possess in the decades prior to the institutionalisation of the medical condition as a national threat.

To develop this argument, a corpus of moralising literature and newspaper articles has been selected, including two play scripts, a number of transcripts and summaries of parish sermons, and other discourses made by clergymen. Although the scope of these sources was probably limited, reaching only a small audience, they demonstrate that a symbolic understanding of cancer was accessible to both literate and non-literate Spaniards. Moreover, the views contained in the corpus are representative of a wider social understanding of the medical condition in the second half of the nineteenth century, as an exploratory research on hundreds of consistent references to forms of social cancer in the digitised archive of Spanish press *Hemeroteca Digital de la Biblioteca Nacional de España* suggests.[53] The following pages focus successively on the symptomatology, prognosis, and therapeutics of the diverse forms of moral cancer, considered in light of their parallelisms with the medical condition.

Moral cancers were located in the depths of individuals; that is, in their souls, spirits, or hearts. Even so, inner corruption manifested itself through physical symptoms, both visual and olfactory. In 1864, the writer Florencio Luis Parreño, author of the two-volume novel *El cáncer de la vida* (*The Cancer of Life*), described the bodily "deformity" of immoral people and the fetidness of their flesh, which became "stinking and rotten".[54] At the scale of the social body, the situation was no different, as an 1883 sermon delivered by a Franciscan missionary to the parishioners of the town of Adón, within Valencia's diocese, revealed. That year, on the occasion of the celebrations of the Corpus Christi, the minister of the Catholic Church narrated that God sent Saint Francis of Assisi to fight "the repulsive cancer that was consuming society, which was completely corrupted … miscreant and stinking".[55] Along the same line, the

[53] *Hemeroteca Digital de la Biblioteca Nacional de España*, accessed 29th July 2017, http://www.bne.es/es/Catalogos/HemerotecaDigital/

[54] Florencio Luis Parreño, *El cáncer de la vida,* Vol. 2 (Madrid: Oficina tipográfica del Hospicio, 1864), 625 and 618.

[55] Francisco De Paula, [Resumen de la oración del Reverendo Padre Comisario de la Tercera Orden de Penitencia de San Francisco en la Iglesia Parroquial de Adón,

novelist López del Arco characterised "the social cancer of misery in its different forms; namely, ignorance, dishonour, vice, licentiousness, crime, etc.", as a plurality of "social sores" showing a "disgusting appearance" and exhaling a "revolting stench".[56] These rhetorical uses of the disease label *cancer* drew on a specific medical representation of the condition: the external cancerous ulcer.

Emerging from identifiable cultural foci, moral cancer progressively spread to its surroundings, from one individual to another. Within a traditional understanding of society, the family stood as the structuring unit of the national body. As such, the propagation of the spiritual condition was regularly described at this scale. For instance, in 1861, the clergyman Antolín Monescillo eloquently described the dangers of irreligious press in terms of the progressive spread of moral cancer within a household. During the discourse for his investiture as Bishop of Calahorra y la Calzada, a diocese in the north of Spain, he deplored:

> [T]hat the family men themselves are, through the subscription to unwholesome newspapers, the introducers in the household of the cancer that, sooner or later, will corrode the depths of the wife, the mother and the daughter, and pervert the understanding of the young man, as well as ruining the innocent but vivid blood that ferments in the heart of the child, and drives the maid crazy.[57]

At the turn of the nineteenth century, the Bishop of Malaga, in Andalusia, insisted on the perils of free press in the same terms, though at a broader scale. As he claimed in a pastoral letter*,* uncensored press was "the cancer that corrodes Christian nations; the sewer from which corruption originates; the breeding ground of all evils".[58]

These sources of cancerous corruption were located inside the national body, which moralist orators and writers could often map. Along with the editorial offices of unwholesome newspapers, they were obviously found in brothels,

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Diócesis de Valencia, durante la festividad del Santísimo Corpus], *El Siglo Futuro,* 2nd June, 1883, 3.

[56] López del Arco, *Cáncer social,* v-vi.

[57] "Continúa la carta pastoral que el Ilmo. Doctor D. Antolín Monescillo, Obispo de Calahorra y la Calzada, ha dirigido a sus diocesanos con motivo de su entrada en el obispado", *La Esperanza,* 6th November, 1861, 2.

[58] Juan Muñoz Herrera, "La prensa contemporánea", *La Lectura Dominical,* 13th February, 1898, 7.

gambling halls and the usury business, but also in aristocratic lounges, a fertile soil for the cultivation of idleness and the ostentation of material wealth.[59] These places stood as endogenous loci of illness, just like the spontaneous accumulation of a humour or the initial proliferation of abnormal cells did it in the body, according to medical literature. Cancer then spread through contagion. As successive editions of the *Diccionario de la lengua castellana por la Academia Española* (*Dictionary of Castilian Language by the Academy of Language*) stressed, the term *contagion* was polysemic. In the medical domain, it certainly referred to a form of disease causation, either through direct or mediated transmission. However, a second meaning of the word was "[t]he malignancy and progressive expansion of the diseases that manifest in a part of the body and, if they are not contained, are communicated to the other [parts]; such as in cancer, gangrene, etc.".[60]

In the symbolic realm, the preferred semantics for the propagation of the malignant condition were those of epidemic diseases, through miasmic – or foul – bodily discharges. This vocabulary was present, for example, in the recurrent criticism that moral hygienists made to political elites over their ambition for personal power and material wealth, to the detriment of the common good. In 1860, a contributor to the newspaper *El Clamor Público* described political corruption as a "cancer", with its "virus" standing at the origins of an "epidemic contagion" that spread through "the foul atmosphere in which we live, the air we breathe".[61] Three decades later, the newspaper *El Pabellón Nacional* phrased the problem in even more detail, remarkable for the extent to which it replicated medical jargon. An article on the "cancer of immorality" that afflicted the local government of Madrid stressed that "its

[59] See, for instance, on brothels, Rafael González Janer, "El cáncer social", *Revista Contemporánea*, Spring 1887, 253-262; on gambling halls, "¡¡Moralidad!!", *La Época,* 28th August, 1868, 1; on the usury business, Enriqueta Lozano de Vílchez, *El cáncer social, drama de costumbres en tres actos y en verso* (Granada, Imprenta de la Madre de Familia, 1886); and on aristocratic lounges, María del Pilar Sinués, "El cáncer del siglo", in *Cuentos de color de cielo* (Guadalajara: Imprenta de Dionisio Rodríguez, 1872), 166-221.

[60] *Diccionario de la lengua castellana por la Academia Española, Novena edición* (Madrid: Imprenta de D. Francisco María Fernández, 1843), 190. Subsequent editions of the dictionary – published in 1852, 1869, 1884, and 1899 respectively – included similar definitions, with only minor and non-significant changes.

[61] Fernando Corradi, "Sección política", *El Clamor Público,* 28th August, 1860, 1.

pestilence corrupts the air that is breathed and poisons everything that falls within its reach", to the point that even the most respectable politicians "end up feeling lightheaded and intoxicated" with its "vapours".[62]

Moral hygienism was also greatly concerned with prostitution. As early as in 1850, an editor of *El Clamor Público* denounced this immoral practice as the source of a "cancer", conceived of as "a disease eminently contagious that spreads from this foul drain to the bosom of families through dissolute [individuals] … and which, to the children of a marriage, is like the worm to the fruits". Then, the news writer wondered: "Just like it is thought that steps should be taken against … epidemic afflictions, why there should not be attempts to extinguish this other [form of] contagion … ?".[63] In time, metaphor replaced comparison. In 1887, an article of the journal *Revista Contemporánea* that dealt with the "social cancer" of prostitution described brothel women and their clients as a "crowd swamped in filth" that was at the origins of a "plague".[64]

Other forms of moral cancer were similarly identified with epidemic diseases. For instance, in 1868, the newspaper *El Imparcial* published an article on the "social cancer" of women obsessed with the purchase of expensive goods, also referred to as "this yellow fever of luxury".[65] Likewise, in 1876, an article published in the weekly publication *El Correo de la Moda* described licentious plays as a "theatrical cholera" and as a "social cancer".[66] In 1878, an article on "usury" that appeared in the newspaper *La Época* referred both to "the ulcers of its leprosy" and to "such a corrosive cancer".[67] Overall, the use of terms from both the semantic field of epidemic diseases and the miasmic theory of disease causation to describe the propagation of cancer within the social body had a twofold impact on the popular knowledge of the medical condition. For one thing, it reinforced laypeople's understanding of cancer as an external

[62] "Cáncer fusionista", *El Pabellón Nacional,* 2nd October, 1890, 1.
[63] "Sección política", *El Clamor Público,* 29th October, 1852, 1.
[64] González Janer, "Cáncer social", 259-260.
[65] "Cáncer social", *El Imparcial,* 16th September, 1868, 1.
[66] López de la Vega, "Respecto del Teatro Nacional", *El Correo de la Moda,* 10th July, 1876, 2
[67] "La usura", *La Época,* 29th September, 1878, 2.

malodorous ulcer. For another, it represented cancer as a transmissible disease from one foci to another, with these foci standing both as body parts within a same individual and as individuals within the social body. Ideas of contagion as a form of cancer causation will be further examined in Chapters 4 and 5.

The progressive spread of the cancer of the soul happened alongside manifestations of severe emotional pain. The audience of the drama of manners *El cáncer social,* produced by the conservative playwright Enriqueta Lozano de Vílchez in the mid-1870s, witnessed and possibly retained a vivid expression of this pain. According to a commentator, the play was "represented with great success in the theatres of Granada", due to both its topic and its "theatrical effects".[68] The plot of the story was the propagation of the cancer of usury in a household, with the suffering of the family members enacted in profuse detail. The drama began with the father, who had fallen into debt with a disproportionate interest rate. Unable to repay it, he felt "horrible sorrow" and "agony in [his] soul".[69] His suffering, in turn, afflicted his wife to the point of feeling that "the heart, these days, is mastered by pain".[70] Likewise, it produced "inhuman pain" in his daughter, who also faced the abandonment of her fiancé due to the family name having fallen from grace.[71] When the head of household – a man who "had drunk to the dregs from the glass of pain" – tried to commit suicide, his son was badly injured in the attempt to stop him,[72] thus leading his mother to an even greater "horrible bitterness" and "lengthy pain".[73]

An earlier moralistic play script titled *El cáncer de la familia* (*The Cancer of the Family*) also insisted on emotional pain as a characteristic sign of moral cancer. Its author, Eloy Perillán Buxò, focused on the misadventures of Trinidad, a young woman who decided to live a life of luxury, waste, and ostentation along with her aunts and brother. At some point, the inability to renounce to this shameless existence in the name of the love for her old father Zenón led

[68] Juan de Granada, "Siluetas granadinas, XX. Lozano de Vílchez (Enriqueta)", *La España Artística,* 8th March, 1891, 3.
[69] Lozano de Vílchez, *Cáncer social*, Act. I, Scene VII, 25.
[70] Ibid., Act. II, Scene 6, 54.
[71] Ibid., Act. I, Scene 8, 28.
[72] Ibid., Act. II, Scene 5, 52.
[73] Ibid., Act. III, Scene 6, 84 and Act III, Scene 2, 77.

Trinidad to remain prostrate in bed with deliriums that "torture[d] her soul".[74] Similarly, in the short story *El cáncer del siglo* (*The Cancer of the Century*), the renowned female writer Pilar Sinués portrayed a Count Raimundo de Carrión whose existence was reduced to boredom and a feeling of profound sadness. After years dedicated to the cultivation of idleness, the aristocrat "endured the pains of cancer".[75] Outside of the domain of moralising literature, in 1884, the newspaper *El Imparcial* published an article by a Doctor Jarrete that represented ambitious individuals as possessing "diseased souls" and as creating a "focal point of infection for an infinity of weak men who suffer horribly because they do not have the means for satiating the avidity of the cancer that devours them".[76]

Along with a dreadful cluster of symptoms, moral cancer presented a severe prognosis. Just like the cancer of the flesh, it was deemed a fatal condition. As the theologist Idelfonso José Nieto claimed during his inaugural address, "the social body is mortally wounded", as it "shelters a hidden cancer threatening to dissolve it".[77] This threatening cancer was none other than religious disbelief, which brought a symbolic – though no less fearsome – death, insofar as it posed an irrevocable ban from the Lord's side in the eternal after-life. Following this same line, a pastoral letter that the Bishop of Cordova addressed in 1853 to the population of his diocese, read:

> [I]t is indispensable that you do not lose sight of the fact that, amongst the first and more terrible evils of our period … we have to include the cold, deadly, and fatal religious indifference, which … spreads like cancer … and, if it does not cause the immediate death of society, it inevitably prepares for it.[78]

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[74] Eloy Perillán Buxó, *El cáncer de la familia: comedia de costumbres en tres actos y en verso* (Madrid: [Manuscript], 1867), Act 3, Scene 1, 89.
[75] Sinués, "Cáncer del siglo", 192.
[76] Juan de la Cerda, "El microscopio del Dr. Jarrete", *El Imparcial*, 15th September, 1884, 3. The front cover of this number of *El Imparcial* stressed that it was the "most widely circulated" newspaper in Spain at that time, with the precision that the print run for the day before had been of 51,800 copies.
[77] [Ha llamado nuestra atención el discurso…], *La Esperanza,* 1st July, 1850, 1.
[78] "Continúa la Carta Pastoral que el Excelentísimo e Ilustrísimo Señor Don Manuel Joaquín Tarancón y Morón, obispo de Córdoba, ha dirigido en 1º de agosto al clero y pueblo de su diócesis antes de dar principio a la anta visita de 1850", *El Católico,* 18th September, 1850, 9. This discourse was previously transcribed (without a title) in *La Época,* 29th August, 1850, 3.

Furthermore, the reputed journalist and essayist Manuel Ossorio y Bernard observed the spreading of "this moral cancer named [religious] indifferentism, … which claims so many victims at present".[79] Likewise, Pilar Sinués described the cancer of idleness of the Count of Carrión as a "mortal weariness that afflicted and consumed" his heart.[80]

To escape from fatal ending, sinners had to follow a process of rectification that was invariably composed of two-stages: firstly, the recovery from moral cancer required a sincere repentance; secondly, this repentance had to be expressed through the continual observation of Catholic obligations. As Florencio Luis Parreño synthesised at the end of his novel *The Cancer of Life,* the illness was curable as long as the "criminal … falls down on his knees, tears appear in his eyes, contrition in his lips, pain in his heart, and all that is crowned by a sure and invariable emendation".[81] Even so, the therapeutics of the cancer of the soul was regularly described in medical terms. Most often, the demand was for an operation of moral surgery. In this regard, Parreño stated that "the only effective means for uprooting the evil" was the surgical "scalpel of Good".[82] In 1890, the poet Jose María Gutiérrez de Alba was just as eloquent in the following verses of the poem "El curita nuevo" ("The Young Priest"): "if the new priest / … / did not stab the scalpel to the very bottom / in every disease of the consciousness / … / so as to uproot the cancer, / he did not act as a skilled surgeon".[83]

Still, a number of commentators envisaged alternative treatments, either surgical or pharmaceutical. For instance, in the weeks before the Paris Commune, a correspondent of the newspaper *La Época* who was based

[79] Manuel Ossorio y Bernard, "Los indiferentes", *La Risa,* 9th December, 1888, 10. The article was reproduced in its entirety in *La Ilustración Ibérica,* 7th December, 1889, 10; and also in *El Álbum Ibero Americano*, 7th June, 1891, 4-5. A shortened version was published in *El Día,* 15th February, 1891, 1-2.
[80] Sinués, "Cáncer del siglo", 192.
[81] Parreño, *Cáncer de la vida,* Vol. 2, 624.
[82] Ibid, 460, and 616.
[83] Jose María Gutiérrez de Alba, "El curita nuevo", in *Poemas y leyendas,* Vol.1 (Madrid: Dirección y Administración Barco, 1890), 20. The original Spanish text read: "si el nuevo sacerdote / … / no clavaba hasta el fondo el escalpelo / en toda enfermedad de la conciencia / … / para extirpar el cáncer por lo sano / no obraba como un hábil cirujano".

in Bordeaux considered that the neighbouring country suffered from "a moral cancer that only a red-hot branding iron is able to excise".[84] According to the Canon of Toledo Juan José Benito Cantero, the preferred treatment was neither the knife nor the cautery, but a drink or an ointment. In an early 1880s sermon addressed to his diocesans, he claimed: "this deep wound, this deadly cancer, this foul-smelling sore, is not curable except through the elixir of faith. Faith is the only balm that can heal this wound.[85] The variety of therapeutic approaches for the cure of moral cancer is indicative of the existence of a competing medical marketplace for the recovery of physical cancer, as will be examined in Chapter 5.

The existence of therapeutics to recover from moral cancer did not mean that a cure was easily obtained. Rather the contrary was true: the disease of the soul was hardly ever defeated. For instance, it took sixteen years for the heroic protagonist of the novel *The Cancer of Life* to amend one single offence of adultery.[86] Although less gifted individuals were not required to make such a colossal effort, they were also, initially, less self-conscious about the immorality of their actions. Therefore, by the time they attempted to regain a righteous life, the illness was already so rooted in their spirit that their efforts were almost inevitably doomed to failure. For example, when old Zenón – from the aforementioned play *The Cancer of the Family* – remarked on the enthusiasm with which his children were planning to leave for the capital and establish themselves as moneylenders to enjoy a life of opulence, he already knew that he faced an "incurable" disease.[87] Hence, although the final scene staged ruined and repentant relatives declaring their intention of strictly keeping with their religious duties, the spectators were invited to remain sceptical: sooner or later, the cancer of the family would reproduce itself.

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[84] "Despachos telegráficos", *La Época,* 20th February, 1871, 3. This article was reproduced in several newspapers; "Noticias extranjeras", *La Esperanza,* 21st February, 1871, 2; "Sección de noticias", *El Imparcial,* 21st February, 1871, 3; "Tienen ojos y no ven", *La Regeneración,* 21st February, 1871, 2.

[85] Juan José Benito y Cantero, "Sermón predicado por el Señor doctor D. Juan José Benito y Cantero, Canónigo Magistral de la Santa Iglesia Primada de Toledo, en la solemne función religiosa celebrada en esta ciudad el día 6 de agosto de 1882, con motivo de la peregrinación a Roma", *La Unión,* 2nd September, 1882, 1.

[86] Parreño, *Cáncer de la vida,* Vols. 1 and 2.

[87] Perillán, *Cancer of the Family*, Act 1, Scene 11, 37.

Along the same lines, at the end of Sinués' short story, the Count of Carrión claimed that his virtuous wife had "redeemed" him from the cancer of idleness, insofar as she had managed to persuade him of the "sacred obligation of work".[88] However, the concluding remark by a close friend suggested that the aristocrat was only experiencing a temporal relief of his symptoms. Foreseeing a possible relapse, he advised the Count to "invariably follow the example of moderation and patience that she [his wife] will give to you, and avoiding idleness with horror, like her; this deadly cancer of the century".[89] Likewise, the Bishop of Cordova previously mentioned considered that the evil spread of religious indifferentism would continue to "hasten, if its unfortunate progress is not contained by virtue of [religious] zeal, activity, and energy".[90] Furthermore, Doctor Jarrete asserted that the cancer of ambition was incurable, except "at the beginning, perhaps". Once this initial stage was left behind, he assured that through "[s]carifying pride and on the strength of diet, it diminishes in intensity, but it does not disappear. It is a constitutional disease and, consequently, it dies with the individual". [91]

With few exceptions of outstandingly upright individuals, the effects of moral therapeutics on the cancer of the soul were merely palliative. At the scale of society, an even more pessimistic view prevailed. The symbolic forms of cancer were considered to be systemic. In other words, the foci of illness were too numerous to hope for the cure of the social body. The Bishop of Cordova shared this opinion with the population of his diocese in another of his pastoral letters, when he stated that religious indifferentism was so widespread amongst Spanish society that "it is not possible to calculate its spread and ravages".[92] Similarly, in an article published in a psychology journal in the late 1870s, the female journalist Amalia Domingo regretted that the cancer of adultery was "so generalised" in Spanish society, as the existence of countless focal points of

[88] Sinués, "Cáncer del siglo", 221 and 212.
[89] Ibid., 221.
[90] "Continúa la Carta Pastoral que el Excelentísimo e Ilustrísimo Señor Don Manuel Joaquín Tarancón y Morón", 9.
[91] De la Cerda, "Microscopio del Dr. Jarrete", 3.
[92] Manuel Joaquín Tarancón y Morón, ["El venerable señor Obispo de Córdoba ha dirigido a los fieles de su diócesis la pastoral que publicamos a continuación"], *La España,* 15th June, 1853, 4.

this “fatal vice” made it unconceivable to achieve its “extirpation”.[93] The fictional usurer of Lozano’s drama of manners described the same state of affairs, although in his case he lauded the situation. At the end of the play, he concluded triumphantly that “[a]s long as there will still be, as there is now, madness, vice, [and] vanity, there will be misery, and usury will rule the world … nobody sees the way of extirpating this… gangrene”.[94]

To summarise, an exploration of selected pieces of the theme of *social cancer* confirms that an understanding of the disease was shared beyond the circles of doctors and patients. Furthermore, the medical semantics used for describing the spiritual condition provides valuable insight into its popular understanding. Cancer was mainly conceived of as an external ulcer, disgusting both to the sight and to the sense of smell, spreading through miasmic contagion, growing progressively and painfully, of a deadly nature, and usually incurable – even through surgical means – due to the difficulties in achieving its complete extirpation from the body. Even though it was hardly possible to stop cancerous growths from reproducing, therapeutics could nevertheless still be directed at the temporal palliation of symptoms. It would undoubtedly be excessive to assume that the entirety of the Spanish population possessed this whole vision of cancer. But what is not in doubt is that this knowledge was socially available, even if nobody in the family, the neighbourhood, or the town, had ever developed a malignant growth.

[93] Amalia Domingo y Soler, “El adulterio”, *Revista de estudios psicológicos,* 8th August, 1877, 6.
[94] Perillán, *Cáncer de la familia,* Act III, Scene 9, 98.

PART II

ILLNESS MEANINGS

CHAPTER 4

SYMPTOMS

II.4.1. Illness Idioms

So far, Part I of this thesis has mainly explored scientific and popular representations of cancer in the second half of the nineteenth century. In Part II, the argument moves on to focus on the patient's view, with each chapter addressing one of the distinct levels of illness meaning that intertwined in a cancer narrative. To begin with, Chapter 4 examines the bodily experience of a malignant condition – understood as the subjective relation with one's own symptoms – from the onset of illness to the end-of-life stage. The research is structured around three general problems intrinsic to the experience of the sick body. A first issue concerns the threshold of visibility of a symptom; that is, the evaluation of a bodily change as evidence of a health problem. In this respect, the initial manifestations of cancer tended to be so seemingly harmless that diseased Spaniards did not consider themselves to be ill at this stage. Case after case, however, the unexpected aggravation of an apparently innocent alteration – either anatomical or physiological – led to its reassessment as a proper symptom of illness.

A second issue regards the threshold of severity of a cluster of symptoms, in connection to the perceived need of looking for medical assistance, and as grounds for the acceptance of a given diagnosis. The individuals who would eventually receive a diagnosis of cancer seldom worried enough about their health to visit a doctor before their symptoms reached significant proportions. This is not to say that they were then ready to face cancer. Adjusting to the idea

of having a malignant condition growing in one's own flesh could be unbearably hard, and some patients remained in denial of the medical judgement for some time. Finally, the third issue has to do with the cultural factors that favoured the amplification or lowering of anxiety towards certain specific symptoms. In an advanced stage of cancer, the most frequent and life-disrupting manifestations of malignancy were undoubtedly chronic pain and deep festering sores. Medical, institutional, moral, and social attitudes towards these symptoms exerted a notable influence on the thoughts and feelings of the Spanish people who had cancer.

Within the biopsychosocial model of medicine, the meanings that sick people confer to their bodily alterations can be traced through what Kleinman termed "conventional illness idioms"; that is, "when a person expresses the sickness experience through established patterns of gestures, facial expressions, and sounds or words".[1] From a historiographical perspective, the semantics of illness – and, especially, the "language of pain" – have also been an important subject of analysis since the publication of Porter's programmatic article on "The Patient's View".[2] With few exceptions, those Spaniards who were diagnosed with cancer during the period under analysis did not produce a personal record of what they lived through. To a significant degree, however, their voice and behaviour can be brought back to life through the testimonies of the doctors who lent an attentive ear and a watchful eye on them. Notably, clinical records documented a true interaction between a practitioner and a patient, which was reflective of two separate views – either complementary or dissonant – about the nature of the latter's illness.

To form a diagnosis, physicians and surgeons did not rely exclusively on the examination of mute bodies. Asides from scrutinising the anatomical geography of their patients, they also listened carefully to their subjective history of illness. As Professor Ferrer y Viñerta asserted: "[t]o compose a clinical case of surgery, all the data provided by the sick person that is behind it have to be taken into account … especially if these and those [information] facilitate judgement about

[1] Kleinman, *Illness Narratives,* 10-11
[2] Porter, "Patient's View", 186-188. For a recent and impressive scholarly contribution to this issue, see Bourke, *Story of Pain.*

[the nature of] the disease".[3] Furthermore, a number of his colleagues stressed that the patient's account should be listened to without interferences and transcribed without alterations. For one thing, Professor Julio Magraner – who was in charge of the Medical Clinic of Valencia in the last quarter of the century – recommended "[t]o avoid presenting issues formulated with the intention of obtaining a particular answer".[4] For another, Professor Ribera y Sans stated that a practitioner "has to behave in no other manner than as a faithful reflection of what the patient says, and write it down without using any technical term" in the anamnesis of the clinical record; that is, the section dedicated to the patient's view.[5]

In practice, these guidelines were not always strictly observed. There are grounds to suggest that the patient's account, rendered in reported speech, was usually shortened and occasionally subjected to minor editing. Nevertheless, in line with the standpoint that the German historian of medicine and the body Barbara Duden took in her book *The Woman Beneath the Skin: A Doctor's Patients in Eighteenth-Century Germany,* these medical writings still allow to "hear the personal stories" of the patients.[6] In its most usual form, the anamnesis systematically addressed the two following issues: firstly, the date of appearance of symptoms, their initial characteristics, and their course of progression; and, secondly, the diagnosis and therapeutic advice received in previous medical consultations, if there was any.[7] That being so, this section of the clinical record provides significant details about the period of falling ill up to the moment of deciding to visit a doctor. In addition, a number of cases describe

[3] Ferrer y Viñerta, *Curso de Clínica Quirúrgica… 1874 a 1875,* 9.
[4] Julio Magraner y Marinas, *Historias clínicas recogidas por los alumnos de clínica médica de la facultad de medicina de Valencia, y corregidas por el profesor de la misma asignatura. Curso de 1881 a 1882* (Valencia: Imprenta de la Casa de Beneficencia, 1882), 28.
[5] José Ribera y Sans, *Clínica quirúrgica general: etiología, diagnóstico, pronóstico y tratamiento de las enfermedades quirúrgicas. Lecciones dadas en la Facultad de Medicina de Madrid* (Madrid: Imprenta y Librería de Nicolás Moya, 1895), 93.
[6] Barbara Duden, *The Woman Beneath the Skin: A Doctor's Patients in Eighteenth-Century Germany*, trans. Ger. Thomas Dunlap (Cambridge, MA, and London: Harvard University Press, 1991), vi. The book was first published in German in 1987, under the title *Geschichte unter der Haut: Ein Eisenacher Arzt und seine Patientinnen um 1730.*
[7] In addition, the anamnesis of clinical records usually included details about the personal and family pathological history and the cause that the patients attributed to their illness. This second issue will be addressed in Chapter 5.

a confrontational attitude towards the medical judgment, revealing instances of cancer denial.

Clinical records also registered pain complaints, and even the pain countenance of the patients who were determined to endure their illness in silence. Likewise, clinicians were sensitive to the emotional suffering of the patients who developed intractable ulcers. These and other medical writings allow us to consider the ways in which Spanish people with advanced cancer lived with and managed their symptoms. Along with the testimonies of doctors, policy makers, hospital administrators, hygienists, religious congregations, fiction-writers, and contributors to the general press, provide complementary insights into the politics of cancer pain relief and cancer stigma. Overall, the bodily experience of cancer illnesses will be mainly approached through the symptomatology associated to the most frequent seats of malignant lesions over the course of the second half of the nineteenth century; namely, the face, women's breasts and reproductive organs, and, to a minor but increasing extent, the digestive apparatus **(Figures 4.1. and 4.2)**.

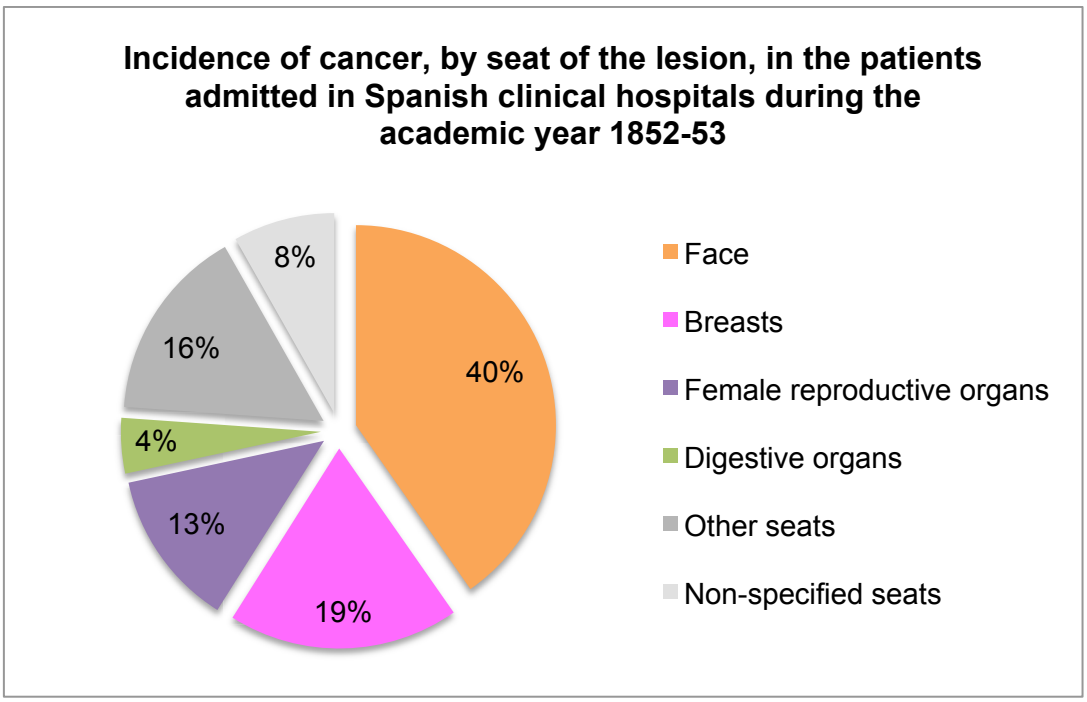

Figure 4.1 Incidence of cancer, by seat of the lesion, in the patients admitted in Spanish clinical hospitals during the academic year 1852-53. Elaborated by the thesis author with data from *Memorias de las clínicas redactadas por los respectivos catedráticos* [1852-53].

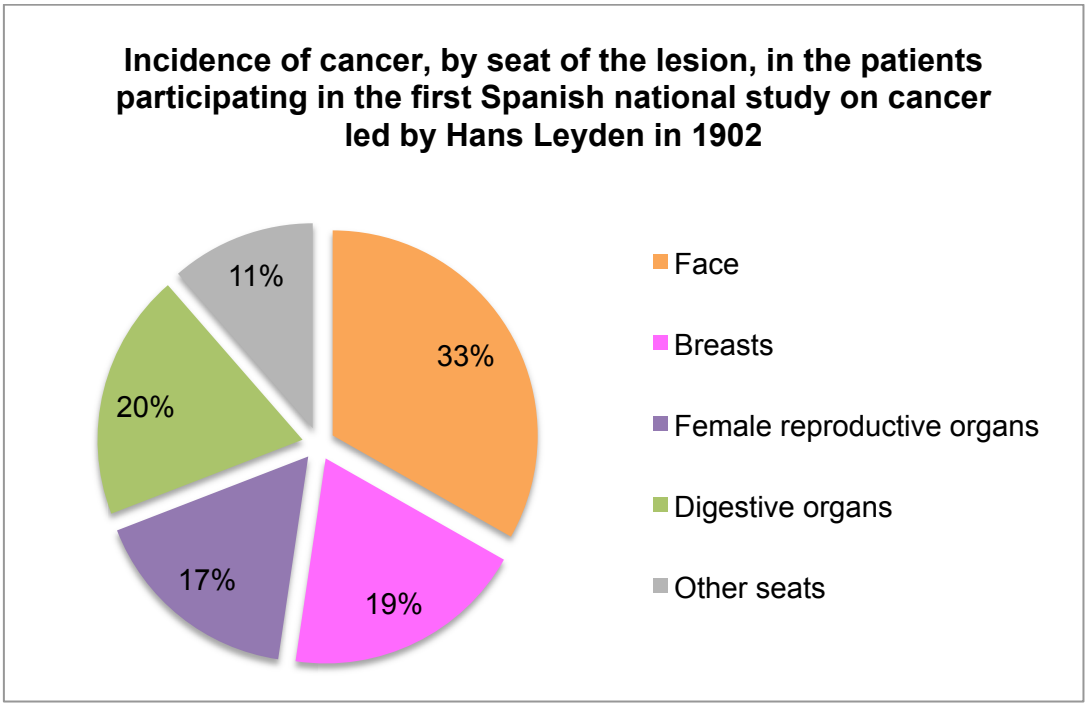

Figure 4.2 Incidence of cancer, by seat of the lesion, in the patients participating in the Spanish national study on cancer led by Hans Leyden in 1902. Elaborated by the thesis author with data from Leyden, *Relación de las investigaciones sobre el cáncer,* 16-17.

II.4.2. Falling Ill

At the end of Chapter 2, a late-nineteenth-century trainee at the Surgery Clinic of Madrid lamented the carelessness that common folk tended to show towards the first manifestations of cancer. Upon arrival to the hospital, it was almost always the case that the most favourable conditions for their cure had already passed. Much scholarly work has been done on the increasing medical awareness on this problem, in connection with the emergence of campaigns of public education about the early detection of cancer.[8] Ultimately, as the French

[8] Social historians of medicine have shown a significant interest in this issue. Amongst the most relevant works in this field, see, in the Spanish context, Medina Doménech, *¿Curar el cáncer?,* 17-21; Isabelle Renaudet, "Vaincre le cancer de l'utérus", 181-198. In the Portuguese context, see Rui Manuel Pinto Costa, "Propaganda anticancerosa, mobilização de elites e consciência sanitária em Portugal: Despertar consciências e educar para a saúde na primeira metade do século XX", *Cultura, Espaço & Memoria* 1 (2011): 299-315. In the French context, see Patrice Pinell, *The Fight Against Cancer. France 1890-1940,* trans. Fr. David Madell (London and New York: Routledge, 2002 [1992]), 65-180; Darmon, *Cellules folles,* 243-249 and 371-388; Nathalie Huchette, "'Le crabe, l'épée et le bouclier': les affiches des organisations de lute contre le cancer et la

social historian Patrice Pinell argued in his book *The Fight Against Cancer,* the widespread dissemination of this medical knowledge over the course of the twentieth century led to "the lowering of the 'sensitivity threshold' to symptoms suggesting a disorder".[9] So far, the historiography of cancer has overlooked the essential role that the cancer patients themselves played in opening the way for this change of mentality. After all, if practitioners managed to know about the earliest symptoms of cancer, it was principally through the reiteration of patients' accounts of how their illness began.

The anamnesis of Spanish clinical records of the last third of the nineteenth century allows catching a glimpse at this issue. Upon admission to the hospital, patients who would eventually be diagnosed with one form or another of cancer tended to retell the same story: some months or years earlier, they had perceived a slight anatomical or physiological change, and responded with indifference or, at the most, had downplayed its importance. Their inability to remember the exact day or week in which it appeared reveals the extent to which any initial apprehension was absent. Insofar as this bodily alteration stayed stationary, indolent, and odourless, it remained below the threshold of visibility of a symptom-qua-symptom. At some point, its fast or prolonged growth, a sudden episode of moderate to severe pain, profuse bleeding, or any other disturbing discharge led to a subjective re-evaluation of its significance. In front of the clinician, cancer patients recurrently referred to the moment in which they first became aware of a seemingly unproblematic mass or a minor dysfunction as the point of departure of their current state of distress.

In some cases, clinical records included an explicit statement over the patients' reported lack of concern when they first noticed the bodily change that they would later recognise as the earliest symptom of illness. For example, during her entry interview to the Surgery Clinic of Valencia, the 53-year-old farm hand Rosa Almiñana explained that, about a year earlier, she mistook a small induration in her left breast for a transient and innocent anomaly. As Ferrer

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fabrique d'un imaginaire du mal et de la gestion du mal (1926-1958)", in *Lutter contre le cancer (1740-1960),* coord. Didier Foucault (Toulouse: Privat, 2012), 387-408. In the British and US contexts, see Cantor, *Cancer in the Twentieth Century*, vii-196.

[9] Pinell, *Fight Against Cancer,* 171.

y Viñerta recorded, “the patient did not give any importance to this new occurrence, believing it would disappear by itself”.[10] Much the same occurred to the 69-year-old farm hand Gabriel Sánchez when he first observed his swollen glans, a couple of months before seeking admission to the Surgery Clinic of Madrid. As Ribera y Sans noted down, the grey-bearded man “believed it was a simple irritation, not paying attention to it, expecting it would dissipate naturally”.[11] Initially, nothing presaged a health problem, let alone the diagnosis of a *scirrhous cancer* or an *epithelioma*, as these two patients respectively ended up receiving.

In a large number of cases, evidence of this similarly negligent attitude can be found in the transcripts of the words that the patients uttered to describe the slightest bodily changes that they had come to associate with their present illness. At first glance, the prevalence of the term *tumour* is misleading. As seen in Chapter 1, the developments in the realm of anatomical pathology up to the mid-nineteenth century resulted in a progressive restriction of its meaning and, ultimately, in its exclusive usage as a synonym for *neoplasm*. Outside of the specialised medical literature, however, the term retained its traditional broad sense of enlargement or protuberance, whatever its nature.[12] Notably, it served to indiscriminately designate minor bodily alterations and symptoms of a serious condition in contemporary books of popular medicine.[13] Looking back, cancer patients associated the term *tumour* to a variety of words falling within the

[10] Ferrer y Viñerta, “Clínica Quirúrgica” [1872-73], 73.
[11] García y Tapia et al, *Historias de Clínica Quirúrgica (primer curso)* [1894-95], 20.
[12] According to the ninth edition of the *Diccionario de la Real Academia Española* (*Dictionary of the Spanish Royal Academy*), published in 1843, a tumour was any “[s]welling and lump that is formed in some part of the animal”; *Diccionario de la lengua castellana por la Real Academia Española, Novena edición* (Madrid: Imprenta de D. Francisco María Fernández, 1843), 723. Consecutive editions of the dictionary (published in 1869, 1884, and 1899) maintained this same definition.
[13] For the all-encompassing use of the term *tumour* in books of popular medicine, see, amongst others, M. Parent-Aubert, *El amigo de los enfermos, o verdadero manual de medicina domestica,* trans. Fr., and ed., José Oriol Junquillo (Barcelona: Imprenta de J.A. Oliveres y Matas, 1846); F.V. Raspail, *Novísimo manual de la salud o medicina y farmacia domesticas,* trans. Fr. (Madrid: Calleja, López y RIbadeneyra, 1857); Balbino Cortés y Morales, *Diccionario doméstico. Tesoro de las familias o repertorio de conocimientos útiles* (Madrid: Imprenta y Estereotipia de M. RIbadeneyra, 1866); Ramón Elías de Molins, *Tratado de patología rural, o sea la descripción de las enfermedades más comunes y el modo de curarlas por medicamentos especialmente vegetales* [Vol.2 of his *Tratado de medicina rural*] (Madrid: Victoriano Suárez, 1884).

former category. Moreover, they stressed their initial absence of preoccupation through the use of the diminutive suffixes *–illo/a* and *–ito/*a (translated as "little" in the below examples).

The clinical record of the 50-year-old farm hand Bautista Alonso, diagnosed with an *epithelioma of the penis,* included the precision that the man first remarked "a small tumour that, as he himself expressed, was like a wart".[14] The 43-year old farmer Vicente Baixauli, who showed a *papillary epithelioma of the lower lip*, characterised his initial anatomical lesion both as a "little spot" ("granito") and a "little blister" ("vejiguilla").[15] The medical interns who wrote down the case of a 60-year-old female patient with initials G.S. detailed, "following the data provided by the sick woman", that her *cancroid of the right cheek* began with "a small furuncle" ("pequeño furúnculo").[16] Depending on the form of the anomaly, other patients with external cancers remembered noticing a "little pustule" ("pustulita");[17] a "little sore" ("llaguita");[18] a "small crack" ("pequeña grieta");[19] a "black-coloured stain" ("mancha de color negruzco");[20] a "little bulge" ("bultito");[21] a "small bulkiness" ("pequeño abultamiento");[22] or a "small swelling" ("pequeña hinchazón").[23] Still more, one of them mentioned

[14] Ferrer y Viñerta, *Curso de Clínica Quirúrgica … 1874 a 1875,* 84.
[15] Ferrer y Viñerta, "Clínica Quirúrgica" [1872-73], 9.
[16] M. Ruiz y López et al., *Historias de la asignatura de Clínica Quirúrgica (segundo curso)* tomadas por los alumnos de la misma (Madrid: Establecimiento Tipográfico de Gabriel Pedraza, 1895), 59.
[17] Enrique Ferrer y Viñerta, "Clínica Quirúrgica", in *Historias de las Clínicas Médica y Quirúrgica impresas para uso de los alumnos de las mismas en la escuela de Valencia. Facultad de Medicina. Curso de 1873-74* (Valencia: Imprenta de Ferrer de Orga, 1874), 78.
[18] Jose María Machi, *Clínica quirúrgica. Curso de 1882 a 83* (Valencia: Imprenta de la Viuda de Ayoldi, 1883), 109 and 187.
[19] Félix Creus and José Grinda, *Historias de la Clínica Quirúrgica (segundo curso) en la Facultad de Medicina de Madrid, revisadas por el Doctor Don Juan Creus y Manso. Año académico de 1878 a 1879* (Madrid: Imprenta de F. Maroto e Hijos, 1879), 161.
[20] Jose Muñoz y García and Juan M. García Camisón, *Historias de Clínica Quirúrgica (segundo curso). Algunas explicaciones de los casos tomadas de las explicaciones del Doctor Don Alejandro San Martín* (Madrid: José Góngora y Álvarez, Imp., 1888), 87.
[21] Ibid., 123.
[22] Machi, *Clínica quirúrgica. Curso de 1882 a 83*, 232.
[23] Cesáreo Magdalena et al., *Historias de la asignatura de Clínica Quirúrgica (segundo curso) tomadas por los alumnos de dicha asignatura. Curso de 1893 a 1894* (Madrid: Est. Tip. de Gabriel Pedraza, 1894), 200.

the appearance of a "pupa", a word that children, especially, used to designate slight wounds.[24]

Occasionally, a cancer patient reported having tried to get rid of one of these bodily alterations when they first became aware of it. This behaviour was nevertheless consistent with the lack of perception of being ill. For instance, the 48-year-old farm hand Antonio Gómez, who received a diagnosis of *melanotic sarcoma,* recalled that, four years previously, his immediate reaction on the discovery of a "circular black-brown stain" in the external corner of his left eye was "attempting to remove it through repeated washing". When he realised that it was not dirt but a facial blemish, he just became used to it. [25] In turn, the 38-year old peasant farmer Antonia Bayarri, who presented a *cancerous diathesis*, acknowledged that, about fourteen months earlier, she first sensed a little tumour in the vicinity of her scalp and, "believing it was a wart", she "tied it strongly" with some wire or string for uprooting it. After an unsuccessful attempt, and as the protuberance did not disturb her beyond taking minor precautions to avoid its erosion and subsequent light bleeding whilst combing her hair, she also resolved to live with it.[26]

In retrospect, women diagnosed with cancer in the genital organs reported a similar initial disregard towards their earliest physiological symptoms. For example, the clinical record of the 55-year-old housewife Teresa Pérez, diagnosed with a *vulvo-vaginal carcinoma*, specified that, several months before, she had "noticed some leucorrhoea [a whitish vaginal discharge] and bleeding stretch marks, which she ignored".[27] With regard to the first stage of uterine cancer, the late-nineteenth-century gynaecologist Policarpo Lizcano

[24] El Alumno Médico, *Historias clínicas de los enfermos acogidos en el Hospital Clínico de la Facultad de Medicina de Madrid. Curso académico de 1880-1881* (Madrid: Administración Plaza de la Cebada, 1881), 30. For the meaning that the term "pupa" had at the time, see the entry "Pupa", in *Diccionario de la Lengua Castellana por la Real Academia Española, Duodécima edición* (Madrid: Imprenta de D. Gregorio Hernando, 1884), 882.

[25] Manuel Tapia, *Historias de Clínica Quirúrgica*: *colección de más de 300 observaciones completadas con análisis histológicos y trazados esfimográficos recogidas durante los cursos de 1877 a 1880 en la clínica del Doctor D. Juan Creus y Manso, revisadas por éste para su publicación* (Madrid: Imprenta de P. Abienzo, 1880), 234.

[26] Ferrer y Viñerta, "Clínica Quirúrgica" [1872-73], 23-24.

[27] Creus and Grinda, *Historias de la Clínica Quirúrgica … 1878 a 1879,* 296.

highlighted that its characteristic disturbances were so subtle that diseased women "do not consider being sick". [28] Based on years of experience in a public dispensary of Madrid, he detailed that, at the beginning, his patients regarded odourless leucorrhoea with "the usual indifference";[29] and they frequently took genital haemorrhages for "abundant menstrual periods" or phenomena accompanying the "end of the life-period of generation". Moreover, they "barely gave importance" to occasional mild pain, "attributing it to tiredness, excesses, or catching a cold".[30]

In contrast, Spanish patients diagnosed with a stomach cancer did associate their earliest physiological alterations with proper manifestations of a health problem from their onset. Still, it tended not to worry them enough to seek medical aid. Professor Esteban Sánchez de Ocaña – in charge of the Medical Clinic of Madrid – used to explain to his trainees that this malignant condition "begins with quite poorly-defined digestive alterations".[31] Medical interns highlighted that these disturbances were regularly mistaken for chronic indigestion.[32] Upon admission to hospital, stomach cancer patients acknowledged that their current illness started long ago with symptoms ranging from "heaviness" after the consumption of food to "thickness of the tongue", "a burning throat", "acrid belches", "bitter disgorgements", and "flatulence".[33] The clinical record of the 41-year-old farm hand José Sierra specified that the patient endured these troubles for five years because "they did not impair him to do his job".[34] Similarly, that of a 56-year-old retired policeman detailed that,

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[28] Policarpo Lizcano, *Clínica Ginecológica. Casos clínicos de la consulta de ginecología de la Casa de Socorro de la Inclusa* (Madrid: Establecimiento Tipográfico de E. Teodoro, 1906), 54.
[29] Ibid., 4.
[30] Policarpo Lizcano, "Sobre el cáncer uterino", in *Revista Iberoamericana de Ciencias Médicas*, Vol.4, coord. Federico Rubio y Galí (Madrid: Instituto Quirúrgico de la Moncloa, 1900), 312.
[31] Esteban Sánchez de Ocaña, *Historias de Clínica Médica (segundo curso): recogidas por varios alumnos de la misma y corregidas por el catedrático de la misma: curso de 1878 a 1879* (Madrid: Imprenta de los Señores Rojas, 1879), 164.
[32] Carlos Calleja et al., *Historias de Clínica Médica (primer curso): curso de 1892 a 1893* (Madrid: Juan Iglesia Sánchez Imp., 1893), 146.
[33] Ibid., 142. See also *Historias de Clínica Médica: 1879-81* (Valencia?, s.n., 188-?), 161; Amalio Jimeno Cabañas, *Extracto de las lecciones de clínica médica, 2º curso, tomadas por los alumnos internos D. Víctor Escribano, D. Ramón Pérez de Vargas y Don Eleuterio Mañeco. Curso de 1890 a 91* (Madrid: La Nacional, 1891), 65.
[34] *Historias de Clínica Médica: 1879-81*, 161.

for many years, the patient "tolerated this situation without neglecting his occupations".[35]

Overall, those Spanish people who would receive a diagnosis of cancer seldom visited a doctor during the initial stage of the disease. Furthermore, exceptions to this tendency do not invalidate the argument presented so far. In other words, those who had an early medical encounter did not necessarily seek assistance just because they were feeling ill. For example, a mere aesthetic concern determined a 30-year-old farm hand showing "a small tumour … resembling a little horn" in the lower lip to look for admission at the Surgery Clinic of Valencia. As Ferrer y Viñerta recorded, this *horny dermoid epithelioma* "did not cause him the slightest disturbance, but as it made him ugly, he decided to consult with a practitioner".[36] In turn, the 18-year-old female servant Valentina Fernández, who was diagnosed with an *abdominal sarcoma* at the Surgery Clinic of Madrid, recounted that she first checked with the medical team of a Maternity House. In the preceding weeks, she had some nausea and disgorgements, in parallel to progressive belly growth and the cessation of the menses. On these grounds, she "suspected a pregnancy".[37]

In some rare cases, fortuitous circumstances prompted an early cancer diagnosis. Otherwise, diseased individuals did not resolve to pay a visit to a doctor until they evaluated their bodily alterations as proper symptoms of some kind of disorder. For sure, patients' testimonials varied depending on the seat and type of the malignant lesion. Furthermore, neither the threshold of visibility nor the threshold of severity of symptoms was uniform across individuals. Nevertheless, broad tendencies can be discerned. Patients showing an external tumour – initially, in their words, as little as "the head of a pin",[38] "a

[35] Calleja et al., *Historias de Clínica Médica … 1892 a 1893*, 142.
[36] Ferrer y Viñerta, *Curso de Clínica Quirúrgica … 1875 a 1876*, 231. A similar motivation for an early consultation can be inferred from the clinical record of a young widowed blacksmith diagnosed with a carcinoma in the lower lip. See Magdalena et al, *Historias de la asignatura de Clínica Quirúrgica (segundo curso) … 1893 a 1894*, 37.
[37] S. Escudero Enciso et al., *Historias clínicas de la asignatura de Clínica Quirúrgica (primer curso) recopiladas por los alumnos de dicha asignatura. Curso de 1891 a 1892* (Madrid: Juan Iglesias Sánchez imp., 1892), 177.
[38] Tapia, *Historias de Clínica Quirúrgica* … 1877 a 1880, 34.

lentil",[39] "a pea",[40] "a bean",[41] or "a chickpea"[42] – regularly stressed its unexpected growth as a source of worry. Not infrequently, an abnormal mass in the breast reached the volume of a "hen's egg",[43] "an apple,[44] or "an orange",[45] before a first medical consultation. Likewise, those patients presenting an ulceration expressed concern about its progressive spreading, which came along discharges of bodily fluids, often "purulent",[46] and exhaling a "bad",[47] "foetid",[48] or "unbearable" odour.[49]

Women with uterine cancer often reported a shocking episode of severe genital haemorrhage as a turning point in the perception of their state of health. Notably, the clinical record of the 38-year-old housewife Dolores González detailed that her first discharge of blood was "so abundant, that it took her a long time to recover, and her lips remained pale as wax".[50] Asides from "copious discharges of blood", a 34-year-old woman with initials J.G. highlighted their "blackish-red colour" and their "extremely foetid odour" as additional constituents of concern.[51] Meanwhile, patients with stomach cancer saw the intensification of their dyspeptic symptoms with alarm. A disgorgement of blood

[39] Jose María Machi, *Historias clínicas-quirúrgicas* [1880-81] (Valencia: n.p., ca. 1881), 134.
[40] Muñoz y García, and García Camisón, *Historias de Clínica Quirúrgica …1887 a 1888,* 110.
[41] Creus and Grinda, *Historias de la Clínica Quirúrgica … 1878 a 1879,* 53.
[42] Manuel Tapia, *Historias de Clínica Quirúrgica, primer curso, revisadas por el Doctor D. Juan Creus y Manso. Curso de 1877 a 1878* (Madrid: Imprenta de Enrique Teodoro, 1878), 281.
[43] Muñoz y García and García Camisón, *Historias de Clínica Quirúrgica … 1887 a 1888*, 123.
[44] El Alumno Médico, *Historias Clínicas … 1880-1881,* 12.
[45] Ibid., 32. See also Manuel Tapia and Juan Azúa, *Historias de Clínica Quirúrgica (segundo curso), revisadas por el Doctor D. Juan Creus y Manso. Facultad de Medicina de Madrid. Curso de 1879 a 80* (Madrid: Imprenta de Enrique Teodoro, 1880), 33.
[46] Tapia, *Historias de Clínica Quirúrgica … 1877 a 1878,* 101.
[47] Creus and Grinda, *Historias de la Clínica Quirúrgica … 1878 a 1879*, 53.
[48] El Alumno Médico, *Historias Clínicas … 1880-1881,* 22. See also García y Tapia et al, *Historias de Clínica Quirúrgica* [1894-95], 20.
[49] Ruiz y López et al., *Historias de la asignatura de Clínica Quirúrgica (segundo curso) … 1894 a 1895*, 207.
[50] Escudero Enciso et al., *Historias Clínicas de la asignatura de Clínica Quirúrgica … 1891 a 1892*, 83.
[51] Magdalena et al., *Historias de la asignatura de Clínica Quirúrgica …1893 a 1894*, 112.

with the colour and consistency of "ink",[52] "tar", [53] or the "grounds of coffee",[54] especially prompted a subjective re-evaluation of the seriousness of their condition. Last, but not least, a certain quantity of pain often accompanied the symptomatic course of a cancerous illness, whether external or internal, and recurrent episodes of moderate-to-severe pain played a significant role in the decision of looking for medical aid.

II.4.3. Denial

Once in the consulting room, patient and doctor combined their lay experience and expert knowledge to translate a cluster of symptoms into proper signs of a specific disease. In principle, each possessed a distinct role. On the one hand, the patient was expected to provide all sorts of raw data about an indeterminate illness. On the other hand, the doctor's professional duty was to confer an authoritative meaning to these data in the form of a diagnosis and a corresponding treatment plan. In practice, however, not all patients faced with the evidence of having cancer complied with this delegation of responsibility over the interpretation of their symptoms. A number of them also had their say about the nature of their condition or, at least, about its seriousness. Moreover, they were ready to confront their views with those of their doctor and to oppose his advice. Just like the Finnish historian Marjo Kaartinen argued in her book *Breast Cancer in the Eighteenth-Century,* "the patients remained agents of their own lives", including "the right to make decisions over their own bodies".[55]

Admittedly, clinical records from Spanish hospitals do not allow addressing instances of cancer denial in a straightforward manner. With few exceptions, clinicians did not specify if their patients had been openly informed of a diagnosis of malignancy – either at the hospital or during a previous medical

[52] Juan Bautista Peset y Vidal, "Clínica Médica", in *Historias de las Clínicas Médica y Quirúrgica. Curso de 1873-74* (Valencia: Imprenta de Ferrer de Orga, 1874), 108.
[53] Calleja et al, *Historias de Clínica Médica … 1892 a 1893*, 136.
[54] El Alumno Médico, *Historias Clínicas … 1880-1881,* 81.
[55] Kaartinen, *Breast Cancer in the Eighteenth Century,* ix-x.

encounter – and it cannot be assumed that it was always the case.[56] Over the decades considered, the regulation of this sensitive aspect of doctor-patient interaction fell into the domain of "Moral Medicine" (also referred to as Medical Ethics, or Deontology). Up to the late 1860s, all students of medicine in their final year had to take an entire course on this subject, which included the following compulsory readings: *Tratado elemental completo de moral médica* (*Complete Elemental Treatise of Medical Morals*) by the Catalonian Professor Fèlix Janer, originally published in 1847; and *Deontología Médica* (*Medical Deontology*) by the French physician Maximilien Simon, translated into Spanish in 1852.[57] These two reference textbooks held contrasting positions, leaving room for individual choice.

According to Janer, the appropriate conduct was to disclose the diagnosis to the patients. As he stated, "[t]he sincere and truthful practitioner will not … downplay the gravity of a disease when he knows it to be dangerous", or life threatening.[58] In contrast, Simon advocated for the concealment of the medical judgement. In his view, the moral physician "has to weigh his words,

[56] In 1892, the clinical record of the 42-year-old farm hand Pedro Vallejo mentioned that this patient had travelled all the way from his hometown in the province of Soria to the University Hospital of Madrid after a local physician he consulted for a painful ulcer in the lower lip "told him it was a cancer"; Escudero Enciso et al., *Historias de la asignatura de Clínica Quirúrgica … 1891 a 1892*, 131. Three years later, the clinical record of a 17-year-old woman with initials F.G. who sought admission in the same establishment mentioned that "she was told she had a malignant tumour"; Ruiz y López et al., *Historias de la asignatura de Clínica Quirúrgica (segundo curso) … 1894 a 1895*, 240. However, these and other cases providing clear evidence of awareness of the medical diagnosis failed to detail how the cancer patient coped with this information.

[57] The *Real Consejo de Instrucción Pública* (Royal Council for Public Education) was the national authority in charge of establishing the undergraduate curricula. This included a selection of reference textbooks for each course that was updated either annually or triennially through a *Real Orden* (Sovereign Ordinance) published in the Government gazette. Between 1852 and 1867, the course on *Medicina moral* (Moral Medicine) had to be based on the two mentioned treatises. See Ministerio de Gracia y Justicia – Instrucción Pública, "Real Orden circular aprobando las listas de los libros que se insertan y que han de servir de texto en las enseñanzas que se proporcionan en las Universidades", *Gaceta de Madrid,* 19th September, 1852, 2; and also, Ministerio de Fomento – Instrucción Pública, "Real Orden aprobando las listas de libros de texto designados por el Real Consejo de Instrucción Pública para segunda enseñanza, Facultades y Escuelas superiores y profesionales", *Gaceta de Madrid,* 3 September, 1864, 1-2.

[58] Fèlix Janer, *Tratado elemental completo de moral médica, o exposición de las obligaciones del médico y del cirujano, en que se establecen las reglas de su conducta moral y política en el ejercicio de su profesión* (Madrid: Librería de los Señores Viuda e Hija de Calleja, 1847), 90.

for fear that an imprudent statement will reveal to the patient the serious nature of his condition".[59] This lack of uniform guidelines compelled each trainee to take his own stand. To complicate things further, some of them ended up adopting a flexible attitude. In the last third of the century, the university course on Moral Medicine became part of the "General Clinic" programme. Significantly, the professor who held that chair at the Medical Faculty of Madrid between 1872 and 1897, José de Letamendi, advised to "notify [the patient] with the diagnosis of his condition, with subjection to the following rule: regarding the content, we will say the truth provided that – far from terrifying or even afflicting him – it will do him good; if not, we will have to deceive him".[60]

Having said that, an outright medical statement was not the only way in which an individual diagnosed with cancer could become aware of the professional judgment about the nature of his or her illness. For one thing, all practitioners who were unwilling to disclose the information to a given patient had to do everything in their power to share the truth with a family member, a close friend, or any other companion in the consultation. Otherwise, they risked being accused of professional misconduct.[61] For another, it is reasonable to suggest that, after a practitioner had strongly recommended an excision, those people who had a growing tumour or ulcer would at least suspect it was malignant. That being so, clinical records do allow to trace instances of cancer denial by inference; that is, through the arguments that some patients gave for refusing an operation, as the following two cases show.

On 15th May 1868, the 40-year-old quarry worker Francisco Galindo was admitted at the *Hospital San Juan de Dios,* in Madrid, for a spreading ulceration

[59] Maximilien Simon, *Deontología médica. Treinta lecciones sobre los deberes de los médicos en el estado actual de la civilización, con un breve resumen de sus derechos,* trans. Fr., and ed., Francisco Ramos y Borguella (Madrid: Imprenta del Boletín Oficial del Ejército, 1852), 316.
[60] José Letamendi, *Curso de Clínica General, o canon perpetuo de la práctica médica para uso de estudiantes y aún de médicos jóvenes,* Vol.1 (Madrid: Imprenta de los sucesores de Cuesta, 1894), 663. The book was divided into seven treatises. The mentioned advice belonged to the treatise on "Ética profesional" ("Professional Ethics").
[61] Janer, *Tratado elemental completo de moral médica,* 91-92; Letamendi, *Curso de Clínica General,* 663.

in the right wing of the nose accompanied by a serous-purulent exudation and a pricking pain. Upon arrival to the establishment, the sick man held the usual interview with the physician-surgeon José Eugenio Olavide, then a young specialist in diseases of the skin starting what would become a prolific career in dermatology. In line with many other patients diagnosed with some form of external cancer, Galindo vaguely remembered the date of appearance of the abnormal growth and conceded that, initially, it did not bother him at all. On the basis of his account, Olavide noted down that, sometime "in June 1866, he first noticed … a small protuberance – hard, indolent, and resembling a wart – that he ignored because it did not cause him any discomfort".[62] About three months later, a slight blow triggered its ulceration and the onset of pain. Increasingly annoyed at the presence of a non-healing wound, Galindo resolved to pay a first visit to a doctor.

After examining the lesion, the practitioner proposed its cauterisation with a piece of red-hot iron, a usual treatment against small persistent ulcers, to which the patient consented. Regrettably, the burning procedure did not produce the desirable outcome. Instead of scarring, the wound kept spreading. Upon seeing its rebellious behaviour, the practitioner instructed Galindo to go to the Surgery Clinic of Madrid "to have an operation". On this occasion, the sick man followed the professional advice only partially. He did seek admission at the University Hospital and remained for some time under the care of its chief surgeon, Professor Manuel Soler y Espalter, but he was actively opposed to the recommended procedure. Despite the medical criteria, or precisely because of that, Galindo came up with the idea that his condition was syphilitic in nature, much like a "blennorrhagia" he had twenty-two years before, and of which he recovered in four months by virtue of a topic medication.[63] Eventually, he left the surgery ward for the *Hospital San Juan de Dios,* reputed for its specialisation in the treatment of venereal diseases.

During his entry interview to the establishment, Galindo was clear about his intentions. As Olavide recorded, "his idea, in coming to our wards, was to be

[62] José Eugenio Olavide, *Atlas de la Clínica Iconográfica de enfermedades de la piel o dermatosis* (Madrid: Imprenta de T. Fortanet, 1873), 460.
[63] Ibid.

treated for a syphilitic disease".[64] Needless to say, the self-diagnosis contrasted with the medical judgment: Galindo had a *cancroid of the nose*.[65] Even so, the physician-surgeon prescribed a powder of mercuric iodide to be administered twice daily.[66] This was a strategic decision with a threefold aim: firstly, gaining his patient's confidence; secondly, making him face the fact that the topic remedy he demanded was ineffective against his current illness; and, finally, obtaining his consent for a surgical procedure. To Olavide's disappointment, none of this happened. In the early days of June, the patient's symptoms were notably exacerbated. Still, when the applications of mercury powder were discontinued, the physician-surgeon stressed that Galindo was "dissatisfied because we were not insisting in the anti-syphilitic treatment that he wanted", as well as "undoubtedly fearing that we would operate him". On these grounds, this patient took a voluntary discharge.[67]

The thoughts and feelings that Galindo had thereafter about his illness remain unknown. Perhaps he kept defying the authority of medical criteria, and even the very language of his body. Or maybe, at some point, he yielded to the evidence of the malignant nature of his condition and agreed to have facial surgery. As far as it possible to trace the clinical case of this cancer patient, he clung to a subjective interpretation of his symptoms against all odds. In absolute terms, the idea of having syphilis was unlikely a matter of rejoice. In relative terms, however, it seemed less burdensome than the perspective of having cancer. After all, in Galindo's experience, a venereal condition treated in time resulted in a reliable cure. Contemporary practitioners were of this same opinion. At the end of a case of *superficial syphilitic fungus of the testicle* successfully treated with a mercurial ointment, a member of the medical team of

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[64] Ibid.

[65] In Olavide's view, none of Galindo's symptoms matched with the defining anatomical features of a syphilitic growth; namely, a soft consistency, a circular form, a coppery colour, and a positive reaction of its exudations to the litmus paper test. See Olavide, *Atlas de la Clínica Iconográfica,* 11, 20, 26, and 460.

[66] The clinical record of Francisco Galindo only detailed that his patient was prescribed a "powder of red precipitate". Nevertheless, this was exactly how the precipitate of "mercuric iodide" was described in the latest Spanish pharmacopoeia, published three years earlier. Moreover, this chemical compound was characterised as an "anti-syphilitic" remedy. See Real Academia de Medicina, *Farmacopea española. Quinta edición* (Madrid: Imprenta Nacional, 1865), 314-315.

[67] Olavide, *Atlas de la Clínica Iconográfica*, 460.

the *Hospital San Juan de Dios* exclaimed in front of his colleagues: "You can see why eminent specialists have said that, when a tumour is discovered, happy is the patient who had syphilis!".[68]

Whereas this first case exemplifies how patients could produce their own alternative self-diagnosis and insistently demand to be treated accordingly, others adopted different attitudes to their illness. Some outright rejected any possibility of malignancy, clinging instead onto the idea that theirs was a benign ailment. Such was the case of the 62-year-old housewife Josefa Castro, who, during the summer of 1880, rejected the seriousness of a tumour in her left breast despite successive practitioners advising her otherwise. Ultimately, however, she changed her mind and decided that she would undergo an operation. At the beginning of October, Castro travelled the nearly fifty kilometres separating her hometown from the Provincial Hospital of Valencia. On arrival to the establishment, she was referred to its associated Surgery Clinic and held an admission interview with Professor Jose María Machi, who recorded the following details of her evolving experience of illness.

Some nine months earlier, Castro first noticed a "small tumour the size of an almond", which began to grow steadily above the nipple. By the end of July, it already looked like "a hen's egg", and she decided that it might be worthwhile to consult with a local doctor. When the practitioner stated, without hesitation, that "her cure required an operation", the patient was unable to face the diagnosis implicit in these words, "not believing that her illness was of such importance".[69] Back home, Castro resumed her usual occupations until late August. At that time, diffuse back pain prompted her to make an appointment with another local doctor. During the encounter, she attributed her bad state to "overwork". Without denying the immediate influence of exertion on her illness, this second practitioner "gave her the same advice than the first one"; namely, that she needed a surgical procedure to regain her health. Once again, Castro turned a deaf ear to the medical judgement. For a few weeks, she tolerated the

[68] R. Lorente, "Número 194. Hospital de San Juan de Dios. Consulta y cura pública del Dr. Castelo (hijo)", 1887. Archival records of the Museo Olavide, Fundación Piel Sana de la AEDV, Facultad de Medicina de la Universidad Complutense de Madrid, Spain.
[69] Machi, *Historias clínicas-quirúrgicas* [1880-81], 119-120.

pain in her back with the help of a prescribed narcotic balm. Meanwhile, the ever-growing tumour in her chest did not disturb her beyond its weight. She would have lived like that for longer had it not been for the timely visit of a beloved nephew, who was also a degree-qualified doctor. Receiving an identical admonition thrice over had its impact in the woman's mind.[70] Arguably, however, the most decisive element in the subjective re-assessment of the gravity of her condition was not the reiteration of a same counsel but the greater trust placed on this last counsellor.

At the Surgery Clinic, Machi diagnosed the female patient with a *scirrhous carcinoma of the left breast*. Asides from the size of the tumour, whose base circumference was already thirty centimetres, the organ presented indubitable signs of malignancy to the trained eye of the clinician: a retracted nipple, orange-peel skin, adherence to the underlying tissues, and the presence of two swellings in the axillary glands. At the same time, the abnormal growth remained almost indolent. Castro merely reported "some discomfort in the left breast, occasionally spreading to the armpit".[71] Whilst none of the practitioners who examined her considered localised breast pain as a patognomic – or essential – sign of cancer, the lay understanding of malignant conditions was just the opposite. In all likelihood, the sick woman clung to this popular view as she denied the seriousness of her illness and the consequent need of an operation, up to the moment when she had a conversation with her nephew-doctor, a professional whose judgment she finally trusted more than her own on account of their family bond.

Besides the evidence examined in Chapter 3, several late-nineteenth-century commentators insisted on the intrinsic connection that common folk believed to exist between cancer and pain. For one thing, the educational writer Gerardo Blanco – best known by his pen name Amancio Peratoner – asserted that "[p]ain is generally considered to be a symptom of cancer, and it is even believed that cancer without pain does not exist and that a painless tumour in

[70] Ibid., 120
[71] Ibid., 120-122.

the breast cannot be a cancer".[72] For another, the rural physician Ramón Elias noted that "lancinating pain" in the mammary organs on its own sufficed to raise a suspicion of malignancy. As he wrote, "breast neuralgia …. is frequently observed in mature women, or in those nervous and irritable, and they suffer much because they fear a cancer".[73] Even more, the quantity of pain endured was often determinant for accepting the idea of having such a serious condition. With regard to uterine cancer patients, the gynaecologist Lizcano stated: "[i]t is well known that this class of sick women show confidence in the benignity of their illness as long as it does not produce severe pain".[74]

II.4.4. Chronic Pain

Up until the turn of the eighteenth century, the absence of pain was enough to discard a diagnosis of cancer.[75] With the advent of histopathology, medical criteria changed and physical suffering largely ceased to be considered a necessary sign of malignancy. A notable marker of this shift, mentioned in Chapter 1, was the reconceptualisation of the indolent *scirrhus* as a cancerous – instead of a pre-cancerous – lesion. Notwithstanding the above, the experience of a greater or lesser degree of pain was still common in an advanced stage of illness. As the mid-nineteenth-century Professor González Olivares stated: "[t]here are cancers that cause little pain, [whilst there are] others in which pain increases along with their development … and does not abandon the wretched patients until their last breath".[76] After twelve years of professional experience, the clinician was also well aware that moderate-to-severe pain was "the most perturbing [symptom], the one for which the patients most insistently demand a cure to the doctor; [insofar as] it

[72] Amancio Peratoner, *Los órganos de la generación: sus funciones y desórdenes, en el niño, en el adolescente, en el adulto, en el anciano, desde el punto de vista fisiológico, social y moral* (Barcelona: La Enciclopédica, 1892), 264.
[73] Elías de Molins, *Tratado de patología rural*, 293.
[74] Lizcano, *Clínica Ginecológica,* 51.
[75] Moscoso, "Exquisite and Lingering Pains", 21. As Moscoso stated, drawing on evidence from the Early Modern period: "[s]ince not all tumours were considered cancerous, physical suffering became the key diagnostic element".
[76] José González Olivares, "Estudios sobre el cáncer", *El Siglo Médico* 56 (28th January, 1855): 3.

disturbs their sleep, suppresses their appetite, [and] makes them develop sad, melancholic, ideas".[77]

These were not the words of a dispassionate observer. On the contrary, González Olivares claimed that disengaging from patients with incurable diseases – as cancer undoubtedly was, in his view – represented "the most outrageous cruelty" and an act "incompatible with the highly philanthropic and humanitarian feelings of those who devoted all their efforts and sleepless nights to the health and benefit of their fellow men".[78] This reputed clinical surgeon was not alone in his belief. Significantly, his opinions concurred with those of the two reference authors in the domain of medical morals. Both of them instructed practitioners to behave in accordance with Christian compassion towards the incurably ill. As Janer detailed: "[i]f the incurable … cannot be given remedies that will cure their illnesses, they will be given comfort and consolation, their pains will be relieved, their downcast spirits will be enlivened".[79] Likewise, Simon contended: "the principle of incurability … does not exonerate science from the moral duty of looking after the wretched [patients] suffering from those illnesses".[80]

This is not to say, however, that palliative care was a central issue of medical literature. In this respect, Simon conceded that here "the physician cannot find in science more than tentative guidelines" and is consequently forced "to find in his heart the resources that science withholds".[81] The situation remained much the same through the following decades. Contrary to the alleviation of surgical pain, addressed in Chapter 2, the management of chronic pain was seldom the object of public debate, experimentation, and innovation during the second half of the nineteenth century.[82] Above all, the cause of diseases, and their cure,

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[77] José González Olivares, "Estudios sobre el cáncer", *El Siglo Médico* 74 (8th June, 1855): 2.
[78] José González Olivares, "Estudios sobre el cáncer", *El Siglo Médico* 73 (27th May, 1855): 2.
[79] Janer, *Tratado elemental completo de moral médica,* 179.
[80] Simon, *Deontología médica,* 310.
[81] Ibid.*,* 309.
[82] For an exploration of this issue in the Anglo-Saxon context, and especially in Britain, see Martha Stoddard Holmes, "'The Grandest Badge of His Art': Three Victorian Doctors, Pain Relief, and the Art of Medicine", in *Opioids and Pain Relief: A Historical Perspective,* ed. Marcia Meldrum (Seattle: IASP Press, 2003), 21-34.

dominated medical discourse. The internal structure of medical writings on cancer illustrates this stance. Whenever the issue of purely symptomatic relief was addressed, it was in their last section.[83] Amongst these contributions, that of González Olivares stood out for its greater length and detail. Hence, the available means for the relief of cancer pain will be principally reviewed in light of his work.

Palliative cancer care relied on the three branches of therapeutics; namely, surgery, hygiene, and pharmacy. As shown in Chapter 2, the surgical approach retained a controversial status up to the refutation of the dyscrasic, or systemic, nature of the disease. According to the Hippocratic warning known as Aphorism 38, surgery was not only helpless for achieving a cancer cure but also pernicious, as it triggered malignancy. Even if González Olivares subscribed to this general view, he also considered exceptions to the rule.[84] Provided that a cancer patient was robust, well constituted, under the middle age, and seemed to have a circumscribed lesion fully accessible to the scalpel, he was willing to propose a palliative operation.[85] Likewise, during the First Spanish Medical Conference, held in 1864, a number of speakers defended the value of surgery for the temporal relief of cancer pain.[86] With the advent of cellular

[83] Between January and June 1855, the medical newspaper *El Siglo Médico* published successive fascicles of González Olivares' studies on cancer. Only the last fascicle was dedicated to the "Tratamiento de los síntomas" ("Treatment of Symptoms"); González Olivares, "Estudios sobre el cáncer", 74: 2. Spanish-authored monographs on cancer were rarely produced in the following decades. Nevertheless, in the late-nineteenth century, treatises on general pathology usually dedicated significant space to explaining the state of scientific research on neoplasms. Their aetiology, pathogenesis, diagnostic criteria, and surgical therapeutics were reviewed before introducing the issue of the palliative care of the incurably ill. See, amongst others, Arturo Giné y Marriera, *Compendio de patología quirúrgica, fundado en las lecciones explicadas en la cátedra por el Dr. D. Juan Giné y Partagás y exactamente ajustado al programa de dicha asignatura* (Barcelona: Tipografía de Viuda de Jose Miguel, 1896), 597-648; José Ribera y Sans, *Elementos de patología quirúrgica general. Lecciones dadas en la Facultad de Medicina de Madrid*, Vol.2 (Madrid: Imprenta y Librería de Nicolás Moya, 1900), 434-635.

[84] José González Olivares, "Estudios sobre el cáncer", *El Siglo Médico* 68 (22nd April, 1855): 3.

[85] José González Olivares, "Estudios sobre el cáncer", *El Siglo Médico* 71 (13th May, 1855): 1.

[86] *Actas de las sesiones del Congreso Médico Español,* 338, 357, 372-377, 387 and 409. The speakers who held this position were, respectively: Antonio Fernández Carril, surgeon in the town of Alhama de Aragón, Zaragoza; José Eugenio Olavide, Marcelino Gómez Pamo, and Francisco Ossorio, practitioners in different public hospitals of

theory, chemical anaesthesia, antisepsis, and asepsis, it became the preferred clinical approach: even if a well-performed operation failed to cure cancer, at least it prolonged life and moderated its symptoms.[87]

Whilst surgery was not always an option, hygienic means could still grant fleeting moments of wellness, both physical and emotional. Personal cleanliness, González Olivares stated, "contributes to well-being, soothes the pain and torment caused by the illness". In addition, streams of cold water directed to the seat of the lesion eased the body and warm baths calmed down the nerves. A varied diet, accommodated to the "taste", "habits", and "digestive strength" of the patients, "avoided mortifying the miserable sufferer with additional discomfort". In moderate doses, beer, wine, sugar water, and herbal teas – made of sarsaparilla, lemon balm, linden, or orange blossom – also contributed to lift the spirits. As long as the patients' general health was preserved, the surgeon noted, "amusements, outdoor exercise, living in the countryside, and travelling, cheers them up, distracts them, and considerably lessen the suffering".[88] Otherwise, a compassionate practitioner had to redouble his efforts to visit his patients as often as possible and act in the kindest and most affectionate manner at their bedside.[89]

Last, but not least, pharmacy possessed powerful drugs for the alleviation of cancer pain. The narcotic properties of opium and its derivatives, along with those of other plants like belladonna, aconite, henbane, hemlock, and jimsonweed, had long been tested and were known to produce the most effective results, whether administered in the form of a massage ointment, a poultice, a decoction, pills, or hypodermic injections.[90] Nevertheless, legal constraints, physiological side effects, and religious considerations limited their context of administration. In 1860, the *Ministerio de la Gobernación* (Ministry of Interior) issued a Royal Decree for the regulation of the chemist's profession

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Madrid; Andrés del Busto y López, Professor of Surgery Clinic at the University of Madrid; Francisco Alonso y Rubio, Professor of Obstetrics at the University of Madrid; and Idelfonso Asensio, physician to the Royal Family.

[87] Ribera y Sans, *Elementos de patología quirúrgica general,* Vol.2, 632-633.

[88] González Olivares, "Estudios sobre el cáncer", 73: 3.

[89] Simon, *Deontología médica*, 310-319 and 376-378.

[90] González Olivares, "Estudios sobre el cáncer", 74: 2. See also Real Academia de Medicina, *Farmacopea española.*

that remained in force well beyond the turn of the nineteenth century. Within it, narcotics were catalogued as "poisonous" and "heroic" substances. As such, they could only be sold under prescription.[91] Asides from those patients or dedicated carers who resolved to expose themselves to the perils of the black-market – not least, losing all their savings – the pharmaceutical relief of cancer pain depended on medical criteria.

Despite all possible sympathy towards their cancer patients, clinicians tended to be cautious about narcotic analgesia. Echoing the observations of earlier practitioners, González Olivares highlighted that "these painkillers do have the downside of removing the appetite, causing constipation, and becoming completely ineffective in a short period of time". To delay their undesired effects, he proposed alternating them with milder drugs, such as chloroform, hashish, and preparations based on cyanhydric acid. Still, this medication was reserved for *severe* cancer pain. Certainly, the quantity of physical suffering endured was subjective; that is, what counted as an unbearable amount of harm differed from one patient to another. Nevertheless, the Galician surgeon found an objective sign of its severity in insomnia. As he stated, narcotic anodynes "cannot be administered until the pain is so intense that it disturbs the patient's rest".[92] In such cases, prescriptions began with small quantities of the chemical compound of choice (for instance, 6 to 12 milligrams of morphine), "gradually increasing until reaching very strong doses".[93]

An additional restriction applied to those patients who were visibly close to death. During the period under analysis, the Christian understanding of "euthanasia*"* – meaning literally a *good death* – excluded any deliberate action on the part of practitioners that could possibly accelerate the end of life, either corporeal or spiritual.[94] With regard to the latter, Simon's treatise on medical

[91] Ministerio de la Gobernación, "Real decreto mandando que se cumplan las Ordenanzas para el ejercicio de la profesión de Farmacia, comercio y drogas y venta de plantas medicinales", *Gaceta de Madrid,* 24th April, 1860, 1-2. See arts. 19-20. For the list of venomous substances, see the appendix.
[92] González Olivares, "Estudios sobre el cáncer", 74: 2.
[93] Ibid. For the standard prescription of morphine acetate, see Real Academia de Medicina, *Farmacopea española,* 115.
[94] For an intellectual history of euthanasia from Antiquity to the turn of the twentieth century, see Ian Dowbiggin, *A Concise History of Euthanasia: Life, Death, God, and*

deontology noted: “due to their particular effects on the nervous system, narcotics … imprudently administered to dying patients can kill their intelligence in advance, and this is an outcome that must be averted at all costs: it is as forbidden to shorten a person’s moral life as it is to shorten their physical life”.[95] In practice, the moral warning presumably admitted two different interpretations. Clinicians in charge of *cachectic* cancer patients (which would now be termed as *terminally ill* patients) opted for either a complete suspension of the painkillers regime, or for changing the prescription to milder analgesics, in an attempt to lessen their pain whilst preserving the consciousness intact.[96]

Two examples can illustrate these stances. During the second semester of 1879, the practitioner José Mondéjar – in charge of a public dispensary in the centre of Madrid – regularly attended the 62-year-old widow Gregoria Peña. The female patient insistingly demanded a prescription for narcotics, aimed at “mitigating the pains” of a *cancer of the uterus* developed four years previously. In the middle of the summer, she went as far as to ingest forty-eight morphine pills in less than three weeks, complemented with liquid laudanum. Following

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Medicine (Plymooth and Lanham, MD: Rowman & Littlefield Publishers, 2005). As Dowbiggin documents, medically assisted suicide was an existing practice amongst the Ancient Greeks. However, when the Roman historian Suetonius (1st – 2nd century) coined the term “euthanasia”, it was for describing the swift and painless natural death of the Emperor Augustus. For a systematisation of the different meanings of “euthanasia” over the past century and a half, see Milton J. Lewis, *Medicine and Care of the Dying: A Modern History* (Oxford and New York: Oxford University Press, 2007), 198-228. In an overview, Lewis distinguished four definitions of the word: firstly, “voluntary” and “active” euthanasia, or mercy killing, involving the patient’s consent; secondly, “involuntary” euthanasia, through eugenic practices; thirdly, “passive” euthanasia, or withholding life-sustaining treatment; and, finally, “caring for the dying in every possible way”, without taking the risk of hastening death.

[95] Simon, *Deontología médica,* 388. The issue was addressed in Chapter XXII, titled “De la eutanasia” (“On Euthanasia”).

[96] On the emergence of the category of *terminal illness*, in connection with the works of the English nurse and social worker Cicely Saunders in the 1960s, see David Clarke, “From Margins to Centre: A Review of the History of Palliative Care in Cancer”, *Lancet Oncology* 8 (2007): 430-438. For a broader perspective on the modern history of the care of the dying, see Lewis, *Medicine and Care of the Dying*; Juan Manuel Zaragoza, “El enfermo terminal como clase interactiva. Enfermos incurables en España (1850-1955)*”* (PhD thesis, Universidad Autónoma de Madrid, 2012); Fanny H. Brotons, “De los hospicios de la caridad a la Organización Mundial de la Salud: un siglo y medio de cuidados paliativos para enfermos de cáncer”, in *Medicina y poder político. Actas del XVI Congreso de la Sociedad Española de Historia de la Medicina,* ed. Ricardo Campos et al. (Madrid: SEHM and Universidad Complutense de Madrid, 2014), 433-437.

each new prescription, the practitioner kept noting down that the general health of this patient was "still getting worse". Eventually, on 11th December, he refused to supply her with new analgesic drugs.[97] A contrasting case occurred three years later at the Obstetric Clinic of Valencia. For two months, its head physician, Francisco de Paula, administered several narcotics to the 71-year-old widow Camila Salazar, diagnosed with a *cervix cancer* in the stage of cachexia. On 20th December 1882, the physician substituted the prescription of diascordium for two non-opioid analgesics. He had sensed that the end was near, and his intuition proved right: the patient died two days later.[98]

Whatever the perspective on euthanasia that one or another practitioner defended, it has to be noted that chronic severe cancer pain was not always amenable to medication. For a number of long-term users, the strongest analgesics granted, at best, short interludes of physical and emotional rest. In 1873, when the 38-year-old cigar maker Pascuala Puchades was admitted at the Medical Clinic of Valencia for a *cancer of the pylorus*, she had already been receiving "narcotics *intus et extra*" over an intermittent three-year period. During her entry interview with the chief physician Juan Bautista Peset, she described how, initially, the pain she felt resembled that of "a strong pinch" and the drugs procured her with "quite long periods of calm". Since then, Peset noted down, it had nonetheless augmented to the point that this woman "could hardly stand the feeling of her own clothes".[99] For thirteen weeks, the patient received increasing doses of morphine, codeine, laudanum, belladonna, and chloroform. Even so, her suffering persisted. As the physician lamented: "despite her uncomplaining character, she sometimes felt close to despair, and only managed to find solace in the hope of a period of calm".[100]

Along with fellow sufferers whose illness had become refractory to medication, Pascuala Puchades inhabited a liminal space in between the promise of

[97] José Mondéjar y Mendoza, *Consulta pública. Tomo 45. Cuerpo facultativo de la Beneficencia Municipal. Distrito del Hospicio. Principia el día 26 de Abril de 1879 y termina el día 5 de Diciembre de 1879.* Archivo de Villa, Madrid. Section I. *Beneficencia*. File 1.399.3.
[98] Francisco de Paula Campá, *Clínica de Obstetricia, Ginecopatía y Pediatría. Curso 1882-83* (Valencia: Imprenta de la Viuda de Ayoldi, 1883), 35-39.
[99] Peset, "Clínica Médica" [1873-74], 108.
[100] Ibid., 109.

Heaven and the temptation of Hell. At a time in which the Catholic Church exerted a pervasive influence on the Spanish population, a silent endurance of pain was conceived as an expression of moral virtue, a proof of faith in the Lord. Cancer pain was not an exception. Occasionally, the general press reported an exemplary case. For example, in 1858, the newspaper *La Esperanza* extolled the unflinching attitude of the Carlist brigadier Valentín Bermúdez, who had recently died, aged 52, from a cancer of long duration. According to the chronicler, the former soldier deserved as much praise for the serenity with which he confronted "the extremely sharp pain of such a horrific disease" as he did for the bravery that he had demonstrated during the First Carlist War. For sure, he added, "the fair God corresponded [to Bermúdez's integrity and virtue] with a place in Heaven, as a reward for the sufferings he subjected him to, and their endurance with so much Christian resignation".[101]

Whilst a few cancer sufferers may have managed to transform the experience of intractable chronic pain into a heroic opportunity to please the Lord, many others faced a huge moral dilemma. For one thing, they had entered into a kind of Inferno, the place par excellence of eternal torture, as Moscoso argued in his book *Pain: A Cultural History*.[102] For another, their only possible exit – committing suicide – would plunge them into the abyss of the ultra-mundane Hell, and this time irrevocably. If human life belonged to the Lord, as Catholics believed, putting a premature end to it was a mortal sin.[103] In the mid-1870s, the practitioner Cesáreo Lázaro Adradas assisted a patient diagnosed with stomach cancer who had been pondering this issue for some time. Prior to their first medical encounter, the relatives of the sick man came to Lázaro Adradas with the confession that, "for fourteen months, they had been taking turns standing guard, day and night, to prevent his suicide". The patient's body,

[101] N. García Sierra, "Noticias de las provincias", *La Esperanza,* 8th April, 1858, 1.
[102] Moscoso, *Pain,* 192.
[103] Antonio Aguirrezabal, *Curso de educación o tratado de filosofía moral para conducirse digna y decorosamente ante los deberes que impone la sociedad a todas las clases* (Madrid: Establecimiento Tipográfico Gravina, 1863), 226-229. The Catholic understanding of suicide was a major cultural force against its medicalisation in nineteenth-century Spain, as examined in José Javier Plumed Domingo and Luis Rojo Moreno, "La medicalización del suicidio en la España del siglo XIX: aspectos teóricos, profesionales y culturales", *Asclepio* 64(1) (2012): 147-166.

"covered by punctures and bruises", revealed increasing resistance to "the repetition of hypodermic injections of laudanum".[104]

During the second half of the nineteenth century, Spanish statisticians occasionally compiled national aggregated data of suicides due to "continual suffering" ("padecimientos continuos"), "physical suffering" ("padecimientos físicos"), or "incurable disease" ("enfermedad incurable"), as the category was alternatively named depending on the year in which the study was conducted. In all cases, the numbers were low in comparison with the part of the population who endured intractable chronic pain, which included people with cancer but also with TB, scrofula, rheumatism, and gout, amongst other conditions. In the four-year-period 1859-62, only 77 suicides were attributed to this "presumed cause".[105] Even if the numbers were nearly multiplied by five in the quadrennial dating 1881-84 (rising to 357 registered cases), they can still be considered as small in proportion.[106] For sure, religious views functioned as a powerful deterrent to suicidal attempts. Still, in some exceptional instances, cancer pain led an individual to this utmost state of moral disintegration, as a number of news published in the general press show.

For example, in 1874, *La Época* informed that "a distinguished fellow" had thrown himself into the Atlantic Sea due to "the horrible pains that a stomach cancer made him suffer".[107] Likewise, two years later, a journalist of this same newspaper covered the firearm suicide of "a well-dressed subject", which was attributed to "the suffering that a cancer in the lip caused to him".[108] In another article published in 1886 in *El Día*, a journalist reported that a white-collar employee of the Spanish Northern Railway Company who put a bullet in his own head had left a manuscript note explaining that he was taking "such an

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[104] Cesáreo Lázaro Adradas, *Medicina y cirugía populares* (Madrid: Imprenta de Ricardo Rojas, 1895), 109.
[105] Junta General de Estadística, *Anuario estadístico de España. 1860-1861* (Madrid: Imprenta Nacional, 1863),159-160; Junta General de Estadística, *Anuario estadístico de España. 1862-1865* (Madrid: imprenta Nacional, 1867), 156-157.
[106] Ministerio de Fomento – Dirección General del Instituto Geográfico y Estadístico, "Clasificación de los suicidios ocurridos en el cuatrienio de 1881-1884, según las causas conocidas o presuntas", in *Reseña geográfica y estadística de España* (Madrid: Imprenta de la Dirección general del Instituto geográfico y estadístico, 1888), 184.
[107] "Noticias generales", *La Época,* 22nd September, 1874, 3.
[108] "Noticias generales", *La Época,* 12th July, 1876, 4.

extreme resolution" due to "a cancer that made him suffer profoundly".[109] Both news reporters pointed to the attenuating circumstances underlying such a blameworthy act for the Catholic Church in what was clearly a gesture of sympathy. The renunciations to life of these poor fellowmen were characterised as an "act of despair and a "desperate resolution", respectively. Not all attitudes were the same, however. In 1883, a journalist who covered the suicide of "a resident in Cartagena" who had a facial cancer qualified the action as a "crime"; or, in other words, as a self-homicide.[110]

In sum, it is beyond doubt that physical pain was a major source of distress and life-disruption for many patients with advanced cancer. It is also clear that Spanish practitioners were not insensitive to this issue, notwithstanding that – according to the specialised literature – pure symptomatic alleviation was less desirable and worthy of attention than tackling the disease itself. On these grounds, the preferred medical approach to cancer pain relief entailed the infliction of surgical harm. Besides a palliative operation, hygienic means included some mild analgesics, as well as much advice that was aimed at distracting the mind, provided that the patient could afford it. In all respects, narcotic medication was unrivalled when it came to moderate physical suffering, but several factors led to a restricted use. Ultimately, religion was there when medicine failed, as both a source of hope and fear. For one thing, the Catholic understanding of pain offered a sense of purpose to earthly suffering. For another, the moral condemnation of suicide constrained many a tormented faithful to yearn for a quick and natural death.[111]

[109] "Un suicidio", *El Día,* 11th August, 1886, 2.
[110] "Noticias generales", *El Globo,* 1st October, 1883, 2.
[111] In the realm of palliative care in general and cancer pain relief in particular, much has changed since the turn of the nineteenth century. For an insightful exploration of major changes in the politics of chronic pain, including its institutional recognition as an illness in itself in the 1970s, see Moscoso, *Pain,* 5 and 191-213. For a specific analysis of the significant role of cancer pain in this larger process, see Clarke, "From Margins to Centre", 430-438. For a thought-provoking reflection on the current barriers to total pain control, see Bourke, *Story of Pain,* 290-302.

II.4.5. Stigma

In 1963, the social psychologist Erving Goffman published a seminal book on *Stigma,* a term he defined as "an attribute that is deeply discrediting" in the eyes of others.[112] As major examples, he considered prevailing social attitudes of his time towards physical deformity, mental disorder, alcoholism, unemployment, homosexuality, and the belonging to a national, racial, or religious minority. In all cases, bearing a stigma meant to be looked down on and devalued because of a perceived failure to conform to social norms.[113] Whilst this Canadian theorist hardly paid attention to past societies, other scholars have drawn significantly on his work to address the historical experience of illnesses deemed incurable, repulsive, or both.[114] In line with these studies, the notion of *stigma* is likely to capture what it was like to live with intractable skin lesions in general, and cancerous ulcers in particular, in the Spanish society of the second half of the nineteenth century. In an advanced stage of malignancy, deep festering wounds were almost as ubiquitous as pain, and no less damaging to the sufferers' morale.

From the mid-nineteenth century onwards, an increasing number of treatises on good manners and textbooks of elementary education drew an inextricable link between personal cleanliness, social acceptance, and moral virtue. In 2000, the Hispanist and social historian Jean-Louis Guereña explored this flourishing literature in an article titled "Urbanidad, higiene, e higienismo" ("Civility, Hygiene, and Hygienism").[115] For instance, in 1844, a "Resumen de urbanidad cristiana" ("Summary of Christian Civility") that was included in a primary school textbook read, in the form of a catechism: "Q. Which duties does civility impose with regard to cleanliness and neatness? A. That of presenting ourselves in public showing nothing in our person and clothes that might offend the sight and

[112] Erving Goffman, *Stigma: Notes on the Management of Spoiled Identity* (Englewood Cliffs, NJ: Prentice Hall, 1963), 3.
[113] Ibid., 2-5.
[114] Jason Szabo, *Incurable and Intolerable: Chronic Disease and Slow Death in Nineteenth-Century France* (New Brunswick, NJ, and London: Rutgers University Press, 2009), 78-82; Jonathan Reinarz and Kevin Siena (eds.), *A Medical History of Skin: Scratching the Surface* (London: Pickering & Chatto, 2013), 8-13 and 71-127.
[115] Jean-Louis Guereña, "Urbanidad, higiene e higienismo", *Áreas. Revista Internacional de Ciencias Sociales* 20 (2000): 61-72.

the sense of smell of others".[116] In 1885, another textbook on "Nociones de urbanidad y deberes religiosos y sociales" ("Notions of Civility, and Religious and Social Duties") asserted, in turn, that being clean-cut was "the basis of social esteem, because it indicates a habit of order, self-management, and method in every respect".[117]

Illness did not exempt from the judgement of others. A poor hygiene was discrediting even if the person was sick and lacked the means to control illness symptoms. Insofar as a skin lesion remained relatively small, dry, and odourless, modesty demanded it be dissimulated underneath clothes or some kind of patch. Otherwise, the appropriate behaviour was to withdraw from social interaction. In a *Curso de educación* (*Course on Education*) issued in 1863, the Basque moral theorist Antonio Aguirrezabal noted: "[w]hen an illness does not allow one to look neat, the sick person has to excuse him or herself from all visits and not sit at the [dining] table".[118] Indecency, in this context, found its most outrageous expression in sick beggars. In 1883, a contributor to the newspaper *El Liberal* had particularly harsh words for the urban indigents who exhibited putrid sores on every street corner as they begged. Aesthetically, he contended, blind musicians were also unpleasant, albeit the lesser of two evils. As he succinctly stated: "[w]ho would not prefer to have their ears irritated for a little while over the sight and smell of a cancer?".[119]

After a decade of clinical practice, the dermatologist Olavide was well aware of the anxiety that unmanageable skin lesions produced in his hospital patients, who were mainly working class. In his treatise on *Dermatología general* (*General Dermatology*), first issued in 1871, he noted that "man, afflicted by

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[116] *Nuevos tesoros de gramática castellana, ortografía, caligrafía, urbanidad y aritmética; arreglados a la capacidad de los niños que frecuentan las escuelas* (Teruel: Imprenta y Librería de D. Juan García, 1844), 103. Quoted in Guereña, "Urbanidad, higiene e higienismo", 65.

[117] José Martínez Aguiló, *Nociones de urbanidad y deberes religiosos y sociales. Colección de reglas de etiqueta, moralidad y cortesía, según opinión de las personas más eminentes y las prácticas de la buena sociedad. Para uso de la juventud estudiosa, y útil a todos los que deseen conducirse bien en el trato de gentes. Obra declarada de texto por el Gobierno, y con Licencia de la Autoridad eclesiástica,* Third edition, with additions (Madrid: Librería de Hernando, 1885), 22. Quoted in Guereña, "Urbanidad, higiene e higienismo", 66.

[118] Aguirrezabal, *Curso de educación*, 267-268.

[119] Eladio Lezama, "¡Pobres mendigos!", *El Liberal,* 7th September, 1883, 3.

countless illnesses, tends to endure some of those that are painful with resignation; but he does not suffer well those that are visible to others and provoke their scorn, depriving him of social contact".[120] Disfiguring conditions, not least of which were malignant ulcers, undoubtedly caused most damage to social identity **(Figure 4.3)**. In 1883, a journalist of the newspaper *El Museo Universal* provided a vivid description of the fate of a Mr Sáenz due to "a terrible incurable cancer that had eaten away his nose [and] destroyed his face". Prior to falling ill, this man was an architect described as "a cultivated person of great talent and extremely agreeable company". As his health declined, the highly-esteemed subject came to be seen as a mere "object of compassion and repugnancy alike".[121]

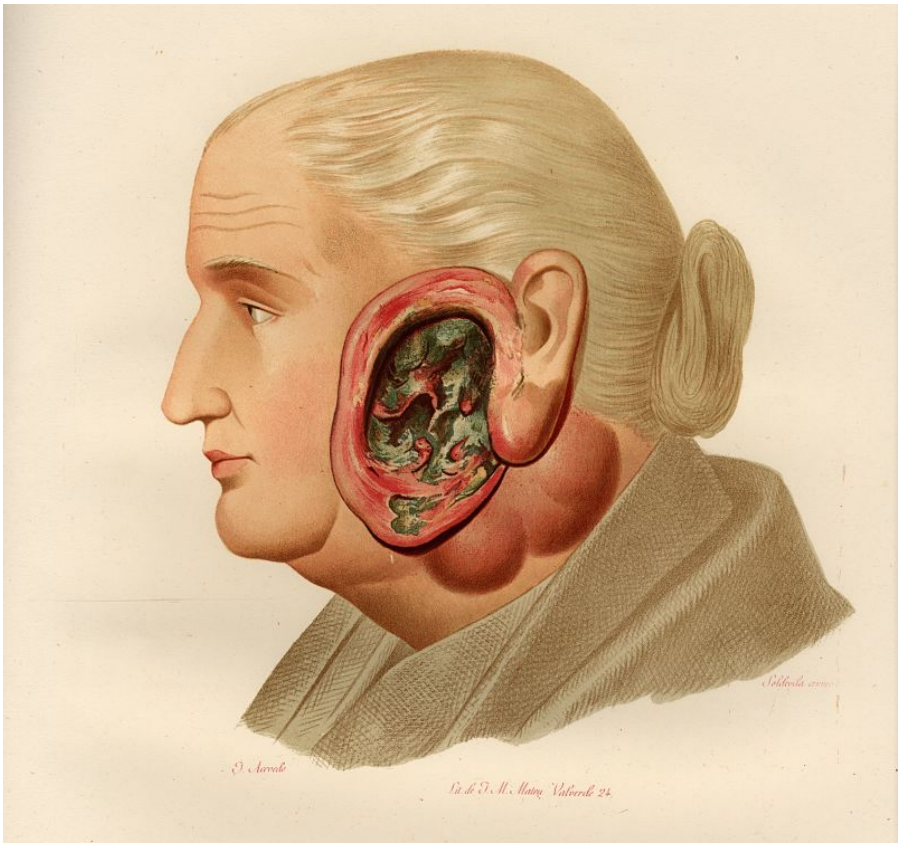

Figure 4.3 Ramón Soldevila, after a drawing by José Acevedo, Ulcerated Cutaneous Cancer (Cerebriform Cancerous Tumour of the Neighbouring Glands), 1867. Chromo-lithography extracted from Olavide, *Atlas de la Clínica Iconográfica,* 484. Reproduced with permission of Museo Olavide.

[120] Jose Eugenio Olavide, *Dermatología general y clínica iconográfica de enfermedades de la piel o dermatosis* (Madrid: Imprenta de T. Fortanet, 1871), 11.
[121] Nemesio Fernández Cuesta, "Revista de la Semana", *El Museo Universal*, 22nd February, 1863, 1.

As might be expected, fear of contagion played a role in the widely shared aversion towards inveterate skin lesions. In his *Lecciones de dermatología general* (*Lectures on General Dermatology*), published in 1866, Olavide stated that, before the emergence of histopathology, even the medical profession lacked systematic grounds for the classification of cutaneous conditions and their consequent differentiation in terms of transmissibility. Since the creation of dermatology as a medical specialty, in the first third of the nineteenth century, a series of experiments involving the inoculation of diseased tissue – mainly in animals, but also in humans – significantly reduced the field of skin lesions that knowledgeable scientists deemed contagious. Nevertheless, none of this had yet managed to change lay beliefs, much to Olavide's consternation. As he wrote: "common folk still view skin rashes with caution and, relying on the well-known saying that 'everything but beauty catches on', they imitate the ancients and run away from these illnesses in spite of the opinions of expert physicians".[122]

Cancer was a case in point. During the Early Modern period, a number of practitioners reported observations of person-to-person transmission, and their statements were repeated time and again in the medical literature up to the mid-nineteenth century.[123] By this time, however, expert commentators usually adopted a critical standpoint. For instance, in his *Tratado completo de las enfermedades de las mujeres* (*Complete Treatise on Women Diseases*), issued in 1844, the physician José Arce de Luque considered the available evidence on the contagiousness of cancer in terms of "implausibility" or "mere coincidence".[124] In his view and that of his peers, recent experimental research provided grounds for disproving this idea. Notably, the reputed French physician Guillaume Dupuytren failed to inoculate "cancerous flesh" and "cancerous pus", respectively, in the stomach and veins of "many dogs". Moreover, his compatriot

[122] Jose Eugenio Olavide, *Lecciones de dermatología general o estudio sintético de las afecciones cutáneas* (Madrid: Imprenta médica de Manuel Álvarez, 1866), 124.
[123] For scholarly discussions of early modern medical views on cancer contagion, see Rouëssé, *Histoire du cancer du sein,* 61-63; Kaartinen, *Breast Cancer in the Eighteenth Century,* 19-22; Skuse, *Constructions of Cancer in Early Modern England,* 81-86.
[124] José de Arce y Luque, *Tratado completo de las enfermedades de las mujeres,* Vol.2 (Madrid: Librería de los señores viuda e hijos de D. Antonio Calleja, 1844), 436-437.

Jean-Louis Alibert injected "cancerous matter" twice over into his own body and that of several team members at the *Hôpital Saint-Louis,* in Paris, with no consequences to regret.[125]

In the following decades, cancer surgeons drew on their own professional practice to confirm these findings. In his treatise on *Caracteres diferenciales histológicos y clínicos entre el lupus, el epitelioma y el cáncer ulcerado* (*Histological and Clinical Differential Characteristics of Lupus, Epithelioma, and Ulcerated Cancer*), published in 1880, Cardenal Fernández asserted: "[a]s surgeons … we have often dipped our fingers – maybe slightly cut or wounded – into the cancerous tissue and ichor, and we lack all proof from our colleagues or the medical literature of a single case of true inoculation of cancer".[126] Meanwhile, non-expert views on this issue were dramatically different. Even the dressings of cancerous wounds were manipulated with caution after their use. In 1870, a contributor to the newspaper *El eco de las ciencias médicas* noted, in this respect, that "old [hospital] rags … impregnated with cancerous pus, not yet completely dry", were transported to the paper mills, and their workers felt uneasy about touching this raw material before it was purified of its "venoms".[127]

Presumably, laypeople did not only fear contact transmission. The evidence presented in Chapter 3 suggests that they also worried about miasmic intoxication. After all, from the Middle Ages to the turn of the eighteenth century, many Spaniards diagnosed with cancer and other pestilential skin lesions with no possibility of being placed in isolation within their neighbourhood had been

[125] Ibid., 437. Dupuytren's experiments were originally reported in Viel-Hautmesnil, *Considérations générales, médico chirurgicales sur le cancer* (Thesis, Paris, 1807), 23. Alibert's experiments took place in 1808, and he himself described them in Jean Louis Alibert, *Description des maladies de la peau, observées à l'hôpital Saint-Louis, et exposition des meilleures méthodes suivies pour leur traitement,* Vol.2, Second Edition (Brussels: Auguste Walhen, 1825), 52-53.

[126] Salvador Cardenal Fernández, *Caracteres diferenciales histológicos y clínicos entre el lupus, el epitelioma y el cáncer ulcerado* (Madrid: Imprenta y fundición de Manuel Tello, 1880), 205.

[127] Esnoz, "Enfermedades propias de los operarios ocupados de las fábricas de papel. Higiene de los mismos", *El eco de las ciencias médicas* 21 (26th May, 1870): 11-12.

confined to leper houses.[128] In 1784, a sovereign ordinance by the King Charles III of Spain still decreed the construction of a new *Hospital de San Lázaro* "to cut short the proliferation of the contagious diseases of leprosy, cancer ["cancro", in the original text] and other corrosive ulcers in the region of Andalusia". As the ordinance detailed, this establishment would give support to the hospitals with identical name and purpose that existed in the southern cities of Granada, Seville, Cordova, and Málaga.[129] In all likelihood, the long-lasting practice of ostracising fellowmen with deep festering sores – and especially those diagnosed as cancer, or leprosy affecting a specific part of the body – left a mark on common folk decades after its extinction.

This was certainly the case for the administrators of the two national hospitals for incurable and invalid people that existed in Madrid: the *Hospital Jesús Nazareno,* for women; and the *Hospital Nuestra Señora del Carmen,* for men. In 1849, the regulation for the *Hospital Jesús Nazareno* stated, in its Article 5, that all patients with "sores" were to be excluded from admission.[130] As the foundation statutes of the medical establishment detailed, these skin lesions were identified with "contagious illnesses".[131] In 1854, the rules for the

[128] Bonifacio Ximénez y Lorite, "Instrucción medico-legal sobre la lepra, para servir a los Reales Hospitales de San Lázaro", in *Memorias académicas de la Real Sociedad de Medicina y demás Ciencias de Sevilla: extracto de las obras y observaciones presentadas en ella*, Vol. 1 (Seville: Imprenta de Francisco Sánchez Reciente, 1766), 173-345. The situation was no different in other Western European countries. On this issue, see Stolberg, "Metaphors and Images of Cancer", 62-63.

[129] "Granada, 25 de abril", *Gaceta de Madrid,* 11th May, 1784, 10.

[130] *Reglamento interior, gubernativo y económico del hospital de mujeres impedidas e incurables de esta corte* (Madrid: Imprenta de D. Jose María Alonso, 1849), 6. For a general analysis of the rules of admission into the hospital *Jesús Nazareno,* see: Florentina Vidal Galache, "Ser Viejo en Madrid: El Hospital de Incurables de Jesús Nazareno y otros centros de asistencia a los ancianos", *Espacio, Tiempo y Forma, Serie V, Historia Contemporánea* 6 (1993): 373.

[131] When the hospital for incurable women Jesús Nazareno was created in 1803, its statutes specified: "in no way [the hospital] will receive [women] presenting fever or contagious diseases"; *Reglamentos y Constituciones de la Casa Hospital de Jesús Nazareno para las pobres impedidas e incurables, del cual es la Reina nuestra Señora su fundadora y protectora, y las Señoras de la Junta sus limosneras, tutoras y conservadoras* (Madrid: Imprenta Real, 1803). Archivo de Villa, Madrid. Section *IV. Corregimiento,* File: 1.5.14. In 1821, the secretary of the hospital, María de los Dolores Pacheco de Magán, produced a summary of the history of its foundation in which she stressed that the rules of the hospital remained unaltered and that "only chronic diseases without sores or fever were admitted" in the establishment; *Noticias y Reglamento de la Casa Hospital de Jesús Nazareno para mujeres pobres incurables. 1803 a 1821.* Archivo de Villa, Madrid. Section *IV. Corregimiento,* File 1.5.14.

Hospital Nuestra Señora del Carmen were more explicit. On the one hand, its Article 5 stated that medical care was reserved for "the chronically ill deemed incurable, with no fever, ulcers, or rashes that can be contagious". On the other hand, its Article 6 made the precision that "cancers", along with other "repugnant and contagious diseases", were not accepted into the establishment.[132] In the following decades, these two hospitals remained dedicated to the assistance of the 'good' (non-threatening) incurables, such as the blind, the asthmatic, the paralytic, and the rheumatic.

Contemporary manuals of domestic medicine also contributed to keeping suspicion alive. Whenever their authors provided advice aimed at preventing the inhalation of malodorous bodily emissions, regardless of the disease these originated from, it was reasonable to infer that all of them were potentially poisonous. For instance, in a book on *Higiene y medicina popular* (*Hygiene and Popular Medicine*) published in 1863, the private physician Antonio Blanco Fernández referred, without further precision, to the "diseases that can give origin to foetid emanations of different strengths via cutaneous, pulmonary, or intestinal routes, which are likely to create a miasmic trade between the sick and the healthy". Interestingly, this practitioner warned against a common but ineffectual domestic practice. As he stated: "[i]t is an error to believe that [sick rooms] can be purified by burning aromatic plants, or sugar, or vinegar, which only serve to mask the miasma". Instead, he recommended using "chloride of lime, or bleach, put in plates in the corners of the room"; or, alternatively, "spraying the floor with chloride water".[133]

Whatever the means employed, domestic attempts at neutralising the emanations of a cancerous wound had to be frustratingly unsuccessful.

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[132] *Reglamento para el Gobierno Interior del Hospital de Nuestra Señora del Carmen, destinado en Madrid a hombres impedidos, incurables y decrépitos, aprobado por Real orden de 29 de mayo de 1854* (Madrid: Imprenta de la calle de S. Vicente, a cargo de José Rodríguez, 1854), 4. Archivo de Villa, Madrid. Section IV. *Corregimiento*, File 2.301.88. For an analysis of the restricted understanding of the term "incurable" in the hospital Nuestra Señora del Carmen, see Juan Manuel Zaragoza, "Enfermedad incurable en la España del siglo XIX: el Hospital para Hombres Incurables Nuestra Señora del Carmen", *Dynamis* 32(1) (2012): 141-163, and also, from the same author: *El enfermo terminal como clase interactiva*, 165-174.

[133] Antonio Blanco Fernández, *Higiene y medicina popular* (Madrid: Imprenta de Pascual Conesa, 1863), 112.

Even in the hospital, where the patients received daily medical supervision and care, its foul – and allegedly noxious – odour persisted, much to the dismay of ward inmates. In 1873, the gynaecologist Francisco Cortejarena – who was Auxiliary Professor at the Clinic for Special Diseases of Women in Madrid – reported that a 50-year-old patient with breast cancer "gave off a characteristic smell, so foetid that the neighbouring patients could not stand it".[134] Other practitioners highlighted the distinctive stench of malignant ulcers, and the consequent distress of those who had them. In 1875, Ferrer y Viñerta reported the case of a 56-year-old cartwright whose *sarcoma in the left forehand* discharged a continual serous substance, which soaked his dressings over and over, and exhaled "a special, unbearable odour". During his stay at the Surgery Clinic of Valencia, this patient did not complain of spontaneous pain. Still, he was visibly "despondent and morally afflicted by his illness".[135]

For virtually everyone, a malignant ulcer was revolting and disturbing. Undoubtedly, this added much anxiety to the burden of living with cancer. Before severe pain compelled cachectic patients to remain in bed, widely shared aversion towards their sight and smell led many to self-imposed isolation, either at home or in the hospital. Even in the intimacy of the household, or in a ward filled with all sorts of illnesses, their proximity was hard to bear, thus deepening their sense of loneliness. In his book *on Chronic Disease and Slow Death in Nineteenth-Century France,* the historian Jason Szabo sensitively argued that "[o]nly love, charity, or self-interest could effectively counterbalance such feelings".[136] Furthermore, in *The Fight Against Cancer,* Pinell showed that popular 'cancerphobia' encountered mystical 'cancerphilia' as its reverse side in the hospices of the *Dames du Calvaire* (Ladies of Calvary). Since 1843, these high-class widows practised Christian humility by becoming "the servant[s] of the most wretched …. whose open wounds and tribulations were likened to those of Christ on the Cross".[137]

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[134] Francisco Cortejarena y Aldevó, *Facultad de Medicina de Madrid. Clínica de partos y enfermedades especiales de la mujer y de los niños. Resumen clínico del curso solar de 1872 a 1873* (Madrid: Imprenta de la compañía de impresores y libreros, 1873), 47.
[135] Ferrer y Viñerta, *Curso de Clínica Quirúrgica … 1874 a 1875,* 66.
[136] Szabo, *Incurable and Intolerable,* 81.
[137] Pinell, *Fight Against Cancer,* 14.

To the south of the Pyrenees, no evidence suggests the existence of a religious organisation specifically aimed at the care of cancer sufferers. Nevertheless, several congregations dedicated to the sick poor understood their charitable work in terms analogous to the Ladies of Calvary. Both the Brothers of the *Asociación de San Felipe Neri* (Association of Saint Philip Neri) and the *Hermanas de la Caridad de San Vicente de Paul* (Sisters of Charity of Saint Vincent de Paul) participated in the life of hospitals as "servants of the sick poor".[138] Their respective rules provided evocative details of this practice. In 1867, an instruction for the brotherhood stated, for instance, that its members had to "wash the feet of the sick, cut their hair and nails … and the brothers will carry out this exercise on a bended knee; and, once done, they will kiss the feet of the sick with the greatest humility and reverence".[139] In 1898, a rulebook for the sisterhood asserted: "as good mothers, they must treat the sick with compassion, sweetness, and warmth; seek their relief and comfort; serve them with respect as they would their masters; and with devotion".[140]

Just like the Ladies of Calvary, the Spanish congregations saw the sick poor as incarnations of the Passion of Christ. For the Brothers of Saint Phillip Neri, these people were "the living image of Christ", and the Sisters of Charity served "Jesus Christ himself in his afflicted members".[141] Allegedly, all the sick poor deserved an equal treatment, but some illnesses seemed more rewarding than others. On the one hand, the more revolting the symptoms were, the greater the humiliation and, with it, the service to the Lord. On the other hand, deep sores were the symptoms which most resembled the stigmata of the crucifixion of Christ. In 1894, the newspaper *El Imparcial* published a short story titled *Omnia vincit,* authored by the conservative writer Emilia Pardo Bazán, which

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[138] *Constituciones de la congregación de nuestro padre y patriarca San Felipe Neri , de seglares, siervos de los pobres enfermos del Real Hospital General de esta Villa de Madrid* (Madrid: Imprenta de la Esperanza, 1867); Juan del Santísimo Sacramento, *Vida de San Vicente de Paul, fundador y primer superior general de la congregación de la misión y de las Hermanas de la Caridad* (México: Mariano Arévalo, 1844), 156.
[139] *Constituciones de la congregación de nuestro padre y patriarca San Felipe Neri,* 24.
[140] *Manual de las Hijas de la Caridad que contiene las palabras de Nuestro Señor Jesucristo y de San Vicente de Paul a las Hijas de la Caridad y una instrucción sobre los votos que hacen en su comunidad* (Madrid: Imprenta de Hernando y cia., 1898), 330. The quote is part of the "vow of serving the sick poor".
[141] See *Constituciones de la congregación de nuestro padre y patriarca San Felipe Neri,* 23, and *Manual de las Hijas de la Caridad,* 330, respectively.

was revealing of this hierarchy. The story described the vocation of a young priest for “those who had repulsive illnesses”, and the “indefatigable zeal and tenderness” with which he assisted them, convinced that “merit would rest on humiliation”. His greatest aspiration was no other than creating an establishment specifically dedicated to the people with “horrific, repugnant, and contagious illnesses, like leprosy or cancer”.[142]

[142] Emilia Pardo Bazán, “Omnia vincit”, *Los Lunes de El Imparcial,* 5th February, 1894, 2.

CHAPTER 5

DISEASE LABEL

II.5.1. Ageing

After years of compiling personal data from his patients, the mid-nineteenth-century surgeon González Olivares commented that cancer did not spare any age range of the Spanish population. However, as he highlighted, "[i]t is in the middle-age when this disease develops with greatest frequency: two-thirds of total cancers appear between the ages of thirty-five to sixty years …. with regard to the remaining one-third, two parts correspond to the elderly, and the rest to the youth".[1] In other words, nearly 9 out of 10 cancers were diagnosed in mature and old age. Half a century later, the results of the first national study on cancer that Hans Leyden directed showed similar results **(Figure 5.1).**[2] The approximate five-year time lag in the age group of prevalence of malignant neoplasms seemed to encompass the evolution in life expectancy at birth. In the last third of the nineteenth century, an increase of up to 5.1 years in the average lifespan of new-borns was registered. More precisely, the numbers rose from 29.7 years in the period 1863-70 to 34.8 years by 1900.[3]

[1] José González Olivares, "Estudios sobre el cáncer", 54: 1-2.
[2] The results of the study were based on 298 clinical records of cancer patients who received treatment on either 1st September or 1st October 1902. The age of the patient was detailed in 296 cases. Admittedly, the sample size was small. Still, it was the widest study on cancer incidence conducted in Spain at the time.
[3] Albert Carreras and Xavier Tafunell, coords., *Estadísticas históricas de España, siglos XIX y XX,* Vol.1 (Bilbao: Fundación BBVA, 2005), 86.

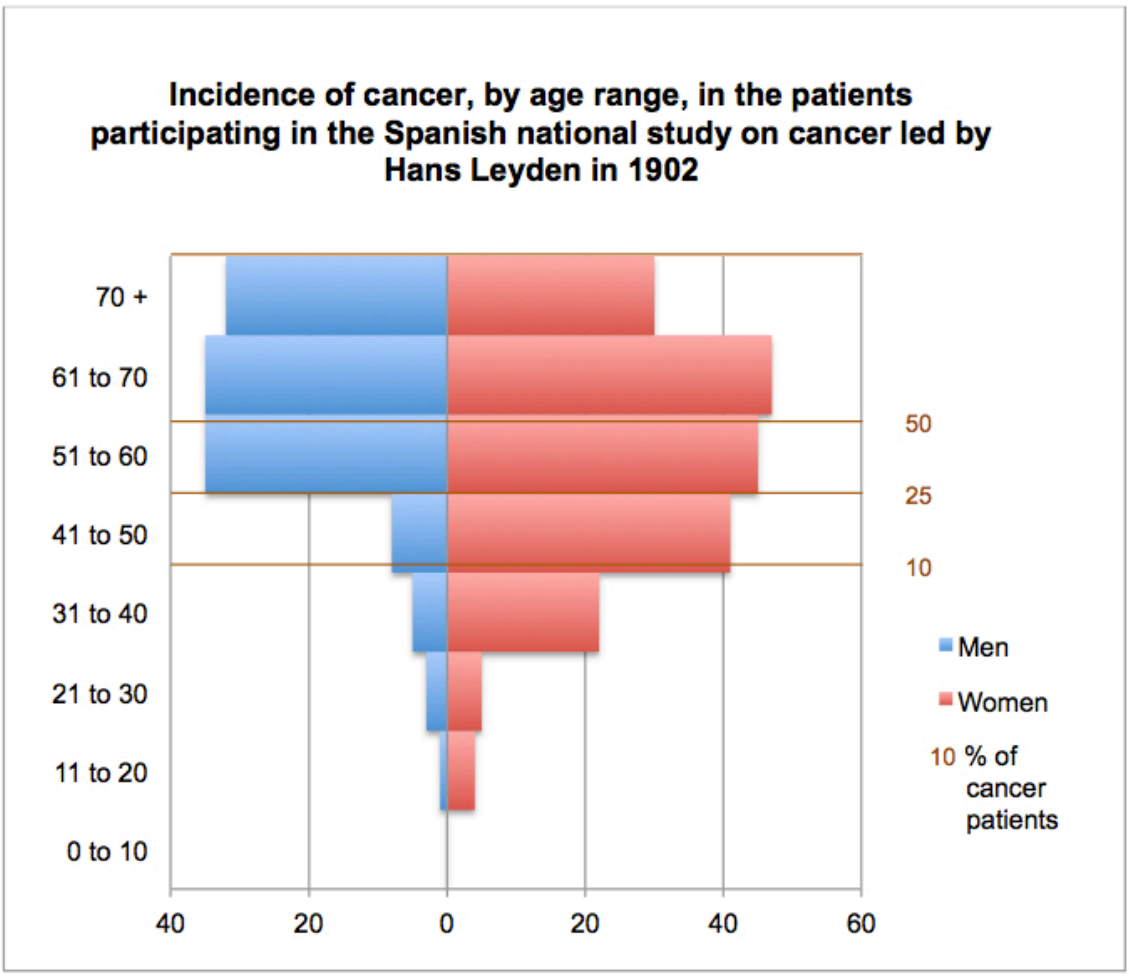

Figure 5.1 Incidence of cancer, by age range, in the patients participating in the Spanish national study on cancer led by Hans Leyden in 1902. Elaborated by the thesis author with data from Leyden, *Relación de las investigaciones sobre el cáncer*, 16-17.

Considering the age pyramid of the Spanish population at the turn of the nineteenth century, the statistical data regarding cancer incidence showed an inverted form. Whilst only a quarter of Spaniards were 40 years or older, it was above this threshold that malignant neoplasms were generally diagnosed **(Figure 5.2)**. Just like it is at present, cancer was mainly a disease of ageing. Longevity, however, remained quite an achievement at a time in which violent causes of death decimated the population. A comparison between the census of 1860 and 1900 is most suggestive of this circumstance, assuming that international migration was not responsible for major demographic changes during this four-decade interval. Over 4 out of 10 between the ages of zero to ten in 1860 did not outlive the nineteenth century. Less than half of those who were between 11 and 20 years old did. Not even 1 out of 3 young adults

managed to reach sixty years of age, and scarcely 1 out of 5 people in their thirties survived to turn seventy **(Figure 5.3).**

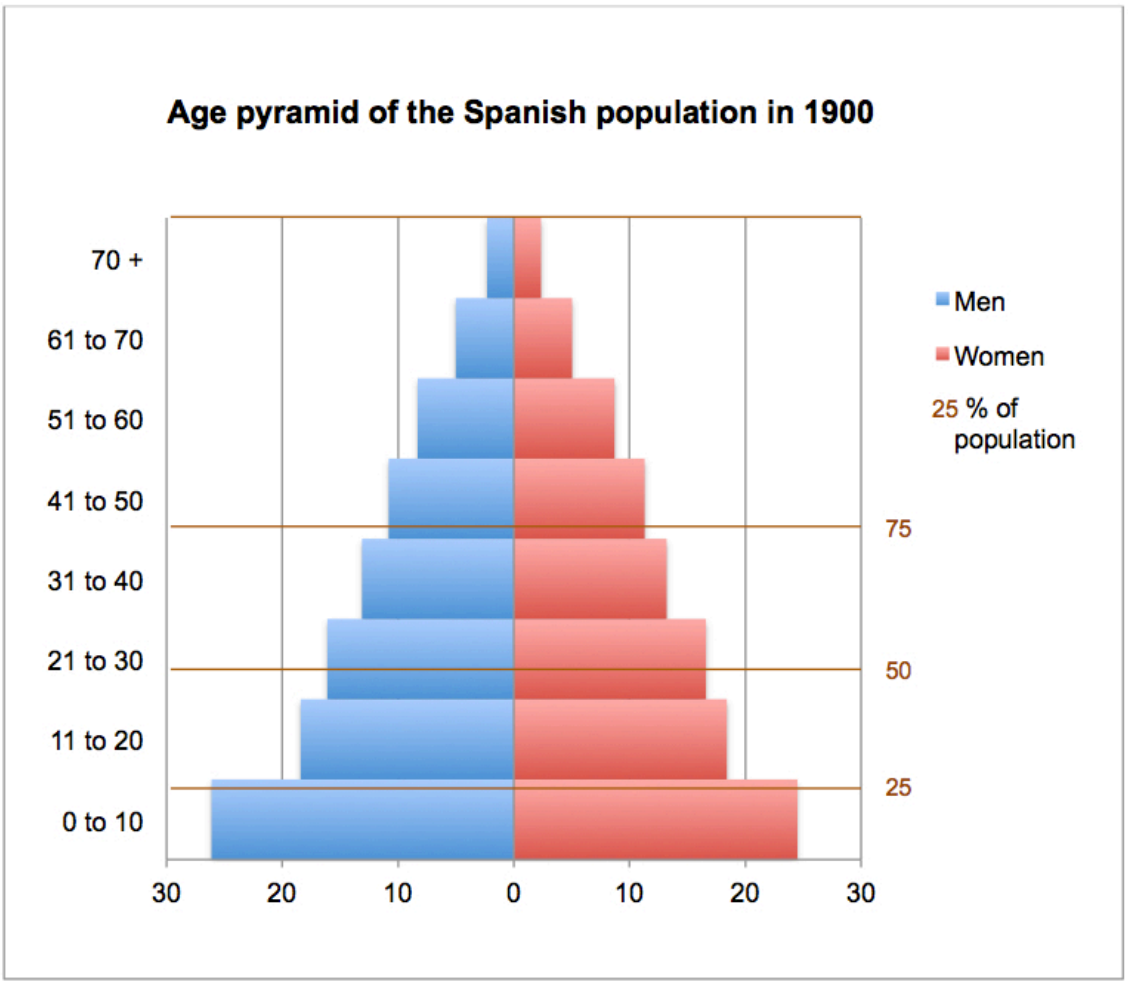

Figure 5.2 Age pyramid of the Spanish population in 1900. Graphic elaborated by the thesis author with data from Ministerio de Instrucción Pública y Bellas Artes – Dirección General del Instituto Geográfico y Estadístico, *Censo de la población de España según el empadronamiento hecho en la península e islas adyacentes en 31 de diciembre de 1900,* Vol.3 (Madrid: Imprenta de la Dirección General del Instituto Geográfico y Estadístico, 1907), 296.

Despite improvements to the average nutrition and hygiene, infant mortality – considering children below the age of five and excluding stillbirths – still accounted for about 43 per cent of the total number of deaths in 1900.[4] In addition, 1 out of 5 deaths were attributed to epidemic diseases, including

[4] Ministerio de Instrucción Pública y Bellas Artes – Dirección General del Instituto Geográfico y Estadístico. *Movimiento anual de la población de España. Año de 1900. Primera parte*, xxxii. The exact proportion of infant mortality, in 1900, was of 42.73 per cent of the total number of deaths.

typhoid fever, smallpox, measles, scarlet fever, whooping cough, diphtheria, croup, influenza, cholera, and TB. The latter condition was responsible on its own for nearly six per cent of deaths. Less dramatically (though not insignificantly) the proportion of deaths due to fatal injuries resulting from accidents and homicides represented an additional 1.5 per cent.[5] In this context, most of the Spaniards diagnosed with cancer during the second half of the nineteenth century can be considered to have had relatively better health than the average population prior to the development of their malignant condition. The first-person account that many of them made about their past record of illness upon admission to a clinical hospital corroborates this idea.

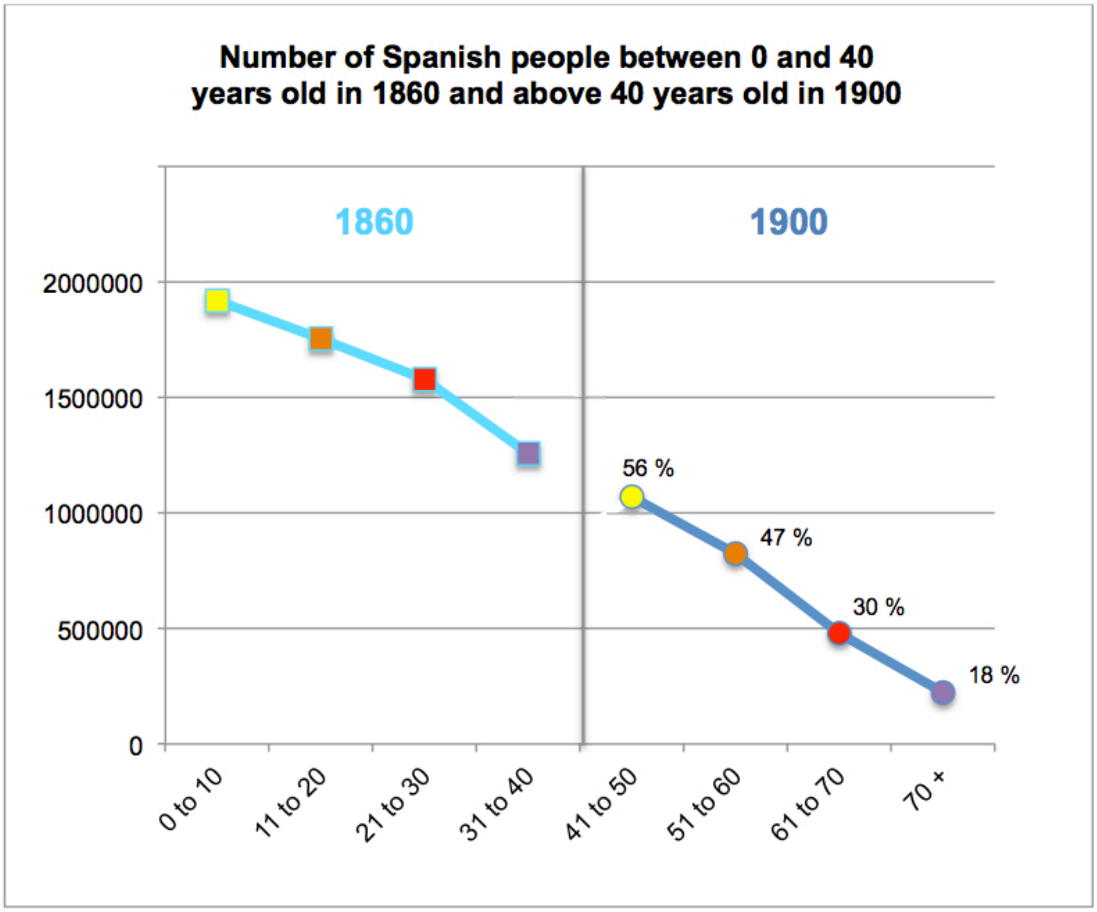

Figure 5.3 Number of Spanish people between 0 and 40 years old in 1860 and above 40 years old in 1900. Graphic elaborated by the thesis author with data from Ministerio de Instrucción Pública y Bellas Artes – Dirección General del Instituto Geográfico y Estadístico, *Censo de la población de España … en 31 de diciembre de 1900,* Vol.3, x-xvii.

[5] Ministerio de Instrucción Pública y Bellas Artes – Dirección General del Instituto Geográfico y Estadístico. *Movimiento anual de la población de España. Año de 1900. Segunda parte,* 368-373.

However, if longevity was harder to achieve, it was just as difficult to renounce to it. Coexisting with the fatal illness of loved ones since a tender age did not entail a greater acceptance of one's own condition, whatever the life stage in which it appeared, and even less so if this condition was reputed as painful, repugnant, and leading slowly to death. Moreover, whenever the sick person was part of a family unit (often as a head of household or a family mother), the disruption of life was never a strictly individual issue **(Figure 5.4)**. Furthermore, in families with limited resources, which were the great majority, sorrow was a matter of the heart as much as of the stomach. Not only there were two hands less to work and the same number of mouths to feed, but disease-related expenses had to be considered. Usually, awareness of having cancer prompted at least two questions; namely, *Why me?* and *What can I do, if anything, to regain my health?* Their possible answers lied inextricably in a time-place specific cultural context of interpretation of the disease label, which substantiates a second level of illness meaning.

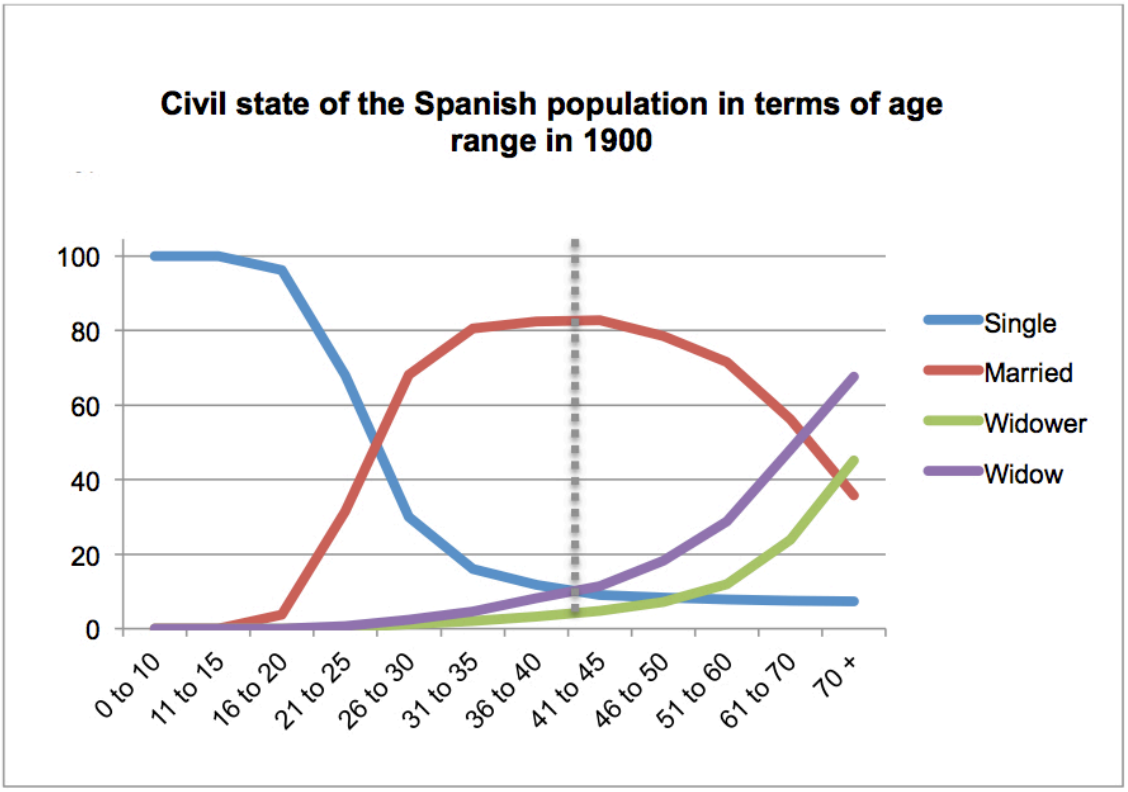

Figure 5.4 Civil state of the Spanish population in terms of age range in 1900. Graphic elaborated by the thesis author with data from Ministerio de Instrucción Pública y Bellas Artes – Dirección General del Instituto Geográfico y Estadístico, *Censo de la población de España … en 31 de diciembre de 1900,* Vol.3, 296-297.

II.5.2. Why Me?

In his 1855 studies on cancer, González Olivares noted "the irresistible and almost generalised need [of his patients] to find a cause accounting for the effects … being unable to believe in the appearance of an illness without a preceding cause".[6] A chronological starting point, in the form of a disrupting event or habit, was felt as necessary for making sense of one's own loss of health and attempting to come to terms with it. Within a linear explanatory framework, the answer to the question *Why me?* served as the subjective marker of the origins of a malignant condition. In addition, it was likely to provide a unifying thread for selecting and ordering subsequent thoughts, feelings, and behaviour that would turn a journey to the dreaded unknown into a communicable narrative, to both oneself as well as significant others. For sure, this was not an exclusive feature of people diagnosed with cancer. Nevertheless, the medical uncertainty surrounding the cause of this specific disease – or, later on, of this group of diseases – made room for a particular proliferation of culturally sanctioned hypothesis.

During the interview that preluded the medical diagnosis, clinicians systematically asked their patients about the reason they attributed to the emergence of their symptoms. Along with the information already examined in Chapter 4, they considered this subjective data as a potential complementary clue for discerning the nature of the disease that they were confronting. Whether or not they found it helpful for establishing the differential diagnosis, the patient's view was later included as reported speech in the corresponding clinical record, thus providing a valuable way for gaining a first-hand perspective on the popular beliefs associated to the onset of a malignant condition. In the national study on cancer that Leyden directed in 1902, the patients pointed to a wide variety of reasons that accounted for their loss of health. Overall, their ideas can be classified in three main categories. Purportedly, the origins of illness were mechanical (that is, resulting from a traumatism or a prolonged irritation), contagious (either miasmic or contact-based), or emotional in nature.

[6] José González Olivares, "Estudios sobre el cáncer", 54: 2.

Within the first category, Leyden highlighted that "many answered questionnaires responded that the occasional cause of cancer was a blow received in the [diseased] region [of the body]", especially in cases of breast and facial cancer.[7] In the absence of a traumatism, several mothers of small children with cancer of the mammary organ attributed the emergence of their symptoms to "prolonged breastfeeding", including a surprising case in which this practice was extended for five years. A woman who developed cancer in her reproductive organs considered that "the use of vaginal pessaries" – a medical device – provoked her illness.[8] Amongst the patients with cancer of the mouth, and particularly in the lips, a smoking habit was the most frequently alleged source of chronic irritation of the diseased part.[9] Others pointed to different reasons: a shoemaker explained that "to soften the leather, she introduced it in her mouth", and she blamed the appearance of her illness on this repeated action. In another instance, a woman pointed to the "pressure of the use of lenses" as the origins of the condition in her nose.[10]

The second category, related to contagion, included a number of cases of patients who believed that their illness was consequent to the miasmic emanations of "unsanitary rooms" and "poor hygienic housing conditions" in which they worked or resided.[11] Two women from a same town whose inhabitants had not seen a single occurrence of cancer for ten years assumed that they both contracted their stomach condition whilst travelling to distant "insalubrious regions with malaria".[12] Another woman pointed to an animal as the origin of her illness. As detailed, "she was bitten, before the presentation of cancer, by a rabid dog". An additional case of supposed transmission of malignancy concerned "a sick woman who had shared the same toilet with other [working colleagues] with cancer in the tobacco factory".[13] As for the third and final category, considering emotional causes, it included rather general statements of female patients feeling "low-spirited", suffering from "anxiety",

[7] Leyden, *Relación de las investigaciones sobre el cáncer en España*, 20-21.
[8] Ibid., 30-31.
[9] Ibid., 20.
[10] Ibid., 30-31.
[11] Ibid., 21 and 30.
[12] Ibid., 14 and 30.
[13] Ibid., 30-31.

prone to the "agitation of the nerves and the spirit", or subjected to "violent impressions of fear".[14]

Quite often, a mutual reinforcement of beliefs took place during doctor-patient interaction. Far from contradicting the opinions of their patients, clinicians were well disposed to consider that the activation of a pre-existing *constitutional diathesis* – that is, a predisposition to disease, as seen in Chapter 2 – depended on more tangible phenomena. In this regard, a long-term distinction between *essential* and *occasional* causes of cancerous conditions was admitted within the medical profession.[15] As the surgeon Rubio y Galí explained: "you can beat any individual lacking the true cause of cancer, and the disease will not develop in him".[16] In other words, only essential causes were deemed necessary for its emergence. Still, in the presence of bodily signs of malignancy, practitioners were ready to validate a variety of occasional causes that patients reported as immediate triggers of their symptoms. As a result, the patients' subjective accounts about the origins of their illness became objectified as causes of cancer, as the following examples from the University Hospital of Madrid will illustrate.

In 1889, the clinical record of Juana Echevarría, a patient who received a diagnosis of *glandular epithelioma of the breast*, detailed that this 68-year-old dressmaker attributed the tumour in her breast to "being hit by the front of a carriage". The students who wrote down her medical case, under the supervision of Professor Ribera y Sans, expressed their agreement with the statement that "traumatisms are the most frequent cause of epithelioma".[17] Likewise, in 1892, the patient Manuel Álvarez associated the appearance of ulceration in his lower lip to his habit of "smoking cigarettes to the end",

[14] Ibid., 21 and 31.
[15] Significantly, the distinction was addressed in the *Panckoucke's Dictionary of Medical Sciences,* whose translation into Spanish remained a major reference for the medical profession decades after its publication; Gaspard Laurent Bayle and Bruno Cayol, "Cáncer", in *Diccionario de ciencias médicas por una sociedad de los más célebres profesores de Europa,* Vol.5, trans. Fr. VA (Madrid: Imprenta de Don Mateo Repullés, 1821), 370.
[16] *Actas de las sesiones del Congreso médico español*, 362.
[17] Alberto Pérez Magdaleno, Arturo Pérez Fábregas, and Ricardo de Federico y Villarroel, *Historias de Clínica Quirúrgica (primer curso). 1889 á 1890* (Madrid: Miguel Humero, Impresor, 1890), 15-16.

and clinicians considered the idea of this 51-year-old man – also diagnosed with an *epithelioma* – to be "rational enough".[18] In the same year, the clinical record of a 33-year-old woman with initials F.M. explained, on the basis of the patient's account, that "since she had family troubles, she did not regain her health". Following a diagnosis of *stomach cancer*, the students in charge of reporting her medical case commented: "the depressing passions of the soul, to which much importance has been given in the appearance of this neoplasm, have been verified in this patient".[19]

This is not to say that any kind of patient's story about the origins of a malignant condition received medical approval. Nor it is to say that patients needed this particular reinforcement to build their individual narrative of illness. Notably, Spanish physicians and surgeons did not believe in the contagiousness of cancer, but public opinion differed from that of these experts. For most of the period considered, the disparity of views regarded characteristic symptoms of advanced cancer, such as the purulent discharges and foetid emanations of malignant ulcers, as seen in Chapter 4. In the late-nineteenth century, however, the scope of the issue broadened to include all cancerous diseases, independently of their associated symptomatology. The findings of the German microbiologist Robert Koch on the bacillus of TB and cholera, published in 1882 and 1883 respectively, played a major role in triggering a wave of scientific

[18] Escudero Enciso et al., *Historias Clínicas de la asignatura de Clínica Quirúrgica … 1891 a 1892*, 99. The correlation between a strong smoking habit and developing cancer was a medically established fact. However, it has to be noted that this problem was unrelated to any notion of carcinogenic exposure during the period under analysis. According to Spanish clinicians, repeated cigarette rubbing against one's lips often caused chronic irritation and burning in this body part. This lesion, in turn, was susceptible of degenerating into a malignant disease. On this issue, see, amongst others, José Lletor Castroverde, "Ensayo sobre las enfermedades cancerosas; y explicación del profesor Récamier para curar los zaratanes por medio de la compresión, sola o combinada, sin necesidad de recurrir a la operación", in *Repertorio Médico Extranjero, periódico mensual de medicina, cirugía, veterinaria, farmacia, química y botánica. Tomo segundo, que comprende el segundo semestre de 1832* (Madrid: Imprenta Real, 1833), 54; Ferrer y Viñerta, *Curso de Clínica Quirúrgica … 1875 a 1876*, 220-221; and Ribera y Sans, *Clínica quirúrgica general,* 103. For an impressive history of changing perceptions about cigarette smoking and its relation to cancerous diseases over the course of the twentieth century, see Allan Brandt, *The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product that Defined America* (New York: Basic Books, 2007).

[19] Carlos Calleja et al., *Historias de Clínica Médica .... 1892 a 1893*, 140.

research into the causative microorganisms of other conditions of uncertain aetiology, not least of which were malignant neoplasms.

No evidence suggests that the Spanish medical profession engaged in this experimental field. Nevertheless, foreign investigations were followed with interest, as several treatises on surgical pathology reveal. According to their authors, all laboratory works aimed at the isolation, cultivation, and subsequent inoculation of a cancer-specific germ remained inconclusive, in terms of their systematicity and replicability, at the turn of the nineteenth century.[20] Meanwhile, the national press was less cautious about the interpretation of preliminary findings. From the late 1880s onwards, contributors to many newspapers were eager to announce that a doctor Freire from Brazil, a doctor Freund from Vienna, a doctor Russell from Edinburgh, or even a doctor Bra from Paris, had discovered "the microbe of cancer".[21] In parallel, some journalists reported findings of Western European epidemiologists on the incidence of malignant neoplasms in cohabitants of a same dwelling, and they recommended their readers avoid these "cancer houses".[22] In short, despite the lack of scientific confirmation, the general press disseminated the idea of germ contamination as a form of cancer causation.

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[20] Giné y Marriera, *Compendio de patología quirúrgica,* 626; Ribera y Sans, *Elementos de patología quirúrgica*, 506-514.

[21] On Doctor Freire's investigations, see Ricardo Becerro de Benzoa, "Las ciencias en 1887 (primer trimestre)", *Revista Contemporánea,* Winter, 1887, 622-623. On Doctor Freund's, see "El cáncer", *La Época,* 12th January, 1888, 4; "Con motivo de la enfermedad del Kromprinz", *La Ilustración,* 22nd January, 1888, 13. On Doctor Russell's, "El microbio del cáncer", *El Correo Militar* 12th December, 1890, 2; "El microbio del cáncer", *Diario Oficial de Avisos de Madrid,* 15th December, 1890, 3. On Doctor Bra's, Arzubialde, "El microbio del cáncer", *El Imparcial*, 11th April, 1899, 1; "Noticias generales", *La Época*, 12th April, 1899, 3; Miguel Gómez-Cano, "Historia del día", *Ilustración Católica de España*, 15th April, 1899, 14; "El microbio del cáncer", *La Época*, 25th April, 1899, 4; Antonio Ambroa, "Crónica parisiense", *La Dinastía,* 28th April, 1899, 1; Antonio Ambroa, "Crónica parisiense", *El Álbum Ibero-americano*, 7th May, 1899, 2.

[22] See, amongst other news, Maese Pedro, "Ecos", *La Justicia,* 8th May 1893, 1; Ricardo, "Casas malditas", *El Imparcial,* 22nd July, 1894, 4; Roger de Flor, "Curiosidades médicas", *La Iberia,* 28th July, 1894, 2; "El cáncer contagioso", *Las Baleares,* 2nd August, 1894, 2. Within the historiography of cancer, several scholars have already mentioned the proliferation of studies on "cancer houses" (especially in France and Britain) in connection to the emergence of the germ theory of malignant neoplasms. See Darmon, *Cellules folles,* 143-147; and Szabo, *Incurable and Intolerable*, 85.

Similar considerations apply to irreligious behaviour. In 1881, Professor Creus y Manso reported that a 25-year-old married man with initials A.M.T. attributed the appearance of hardness in his scrotum and swelling of his testicles to "having been with a woman about five months earlier, who aroused him a great deal without consummating the copulation". When this clinical surgeon diagnosed a *double cancerous sarcocele,* he did it with the precision that the cause of the disease was "completely unknown" in this case.[23] The absence of medical reinforcement of A.M.T.'s view, however, did not necessarily entail that the patient abandoned the idea that he contracted his illness as a result of a moral flaw; namely, a frustrated adulterous sexual intercourse. What is more, the exceptional character of such an act of confession within a medical setting does not mean that other intimate certainties of this kind might not have crossed the mind of more cancer patients. After all, the idea that immoral behaviour could bring cancer upon oneself was not uncommon outside of the clinic.

Asides from the novels, plays, short stories and parish sermons analysed in Chapter 3, in which moral cancer was conceived as a symbolic disease of the soul, a number of Spanish writers of the second half of the nineteenth century portrayed fictional characters who developed physical cancer as a consequence of deviance from their Christian duties and responsibilities. The repetition of this argument, and its use by renowned realist men of letters – such as Jose María de Pereda and Vicente Blasco Ibáñez in the last quarter of the century – suggests that the connection between cancer and sin was present in popular imagination; or, at least, that the readers of the publication would not find it far-fetched. At a time in which a divine intervention was often made responsible for disease causation, be it as a proof of faith for the most virtuous individuals of society – like in the case of the cancerous illness of the Carlist brigadier Bermúdez, mentioned in Chapter 4 – or as a punishment for the infamous, these pieces of literature reinforced the latter view, as the below examples show.

In 1878, the Cantabrian writer Jose María de Pereda published his novel *El buey suelto* (*The Free Ox*). Within the story, the rich, stingy and idle

[23] El Alumno Médico, *Historias clínicas … 1880-1881*, 21.

character known as Herodes stood as "the prototype of the free oxen"; that is, of the middle-aged men who loathed marriage, considering that it brought nothing but "overspending", "grubbiness", and "disorder" to the household.[24] When Herodes developed cancer, the illness came along with everything he deplored in a family home. To begin with, his servants abandoned him after plundering the house; once left alone, he had to face a "repugnant" disease in a "repulsive atmosphere".[25] Moreover, a man "[whose] tongue never moved for another purpose than to defame mankind" developed his condition precisely in the organ of speech.[26] As Herodes understood shortly before expiring, these many coincidences were not the product of misfortune but the effects of "providential punishment", or "divine justice".[27] The last words that his tongue was able to pronounce were "to swear under oath that he accepted his loneliness and torments as a fair punishment for his sin".[28]

In the following decades, the short stories *Juan* and *El Maniquí* – whose authors were Pedro del Sol and Blasco Ibáñez, respectively – equally portrayed fictional cancer patients convinced that their disease developed as a punishment for past sins. During the Third Carlist War, the enlisted soldier Juan desecrated a church crypt in Navarre and mutilated the face and right arm of a friar's corpse. Several years later, his own right arm had been amputated to prevent the spreading of "malignant pimps" and "half of his face was corroded by a cancer", leading him slowly to death. In retrospect, Juan accepted that "such profanation could not remain unpunished, and God wanted it to be exemplary".[29] In the short story *El maniquí,* in turn, the beautiful wife of a modest employee committed adultery with men who provided her with a higher standard of material wealth. When she developed a cancer, her husband attributed the origins of the disease to the "[t]he damned luxury that

[24] Jose María de Pereda, *El buey suelto. Cuadros edificantes de la vida de un solterón* (Madrid: Imprenta y Fundición de M. Tello, 1878), 301 and 29.
[25] Ibid., 295-296.
[26] Ibid., 296.
[27] Ibid., 297.
[28] Ibid., 298.
[29] Pedro del Sol, "Juan", *La Unión,* 13th July, 1887, 1.

was rotten inside her", and the sick woman herself begged his pardon in a desperate attempt to recover her health.[30]

Overall, these few insights introduce the issue of personal responsibility in the development of cancer. Whilst a number of Spanish people diagnosed with one form or another of the disease during the second half of the nineteenth century probably framed their illness in terms of misfortune, others must have pondered the fatal consequences of a moment of distraction; a bad habit; a lack of emotional temperance; an exposure to miasmic emanations or per-contact infection; and, even, in a population of Roman Catholic faithful, of irreligious behaviour. Of course, cancer narratives were susceptible of transformation over time. In other words, no self-explanation about the origins of illness can be considered definitive until the end of life. In the interim, cancer patients also faced the crucial dilemma of evaluating the options they had, if any at all, to regain their health; or, at the very least, to slow down the course of their malignant symptoms. In parallel to trying to make sense of the origins of their condition, many of them engaged in a pathway of resistance to a most undesirable form of death.

II.5.3. The Medical Marketplace

In the early 1880s, a team of surgeons from the Hospital *La Princesa,* in Madrid, commented that the popular beliefs of the Spaniards regarding the prognosis of cancer had not varied at all since the late-eighteenth century. As they stated, "at that time, just like nowadays, the word cancer was associated with the idea of incurability".[31] So grounded was the conviction amongst the population that, on receiving a diagnosis of cancer, a number of patients took it as an unappealable death sentence to be accepted with stoic resignation, without fighting. In this regard, González Olivares reported that several people

[30] Vicente Blasco Ibáñez, "El maniquí", in *Cuentos grises* (Barcelona: Juan de Gasso Editor, [ca. 1900]), 145.
[31] Federico Rubio y Galí, Rafael Ariza y Espejo, and Serafín Buisen, *Reseña del segundo ejercicio de terapéutica operatoria del Hospital de la Princesa* (Madrid: Enrique Teodoro, Impresor, 1882), 53.

he assisted in his consulting room "stubbornly refused to initiate any treatment as soon as I declared the nature of the condition, and they waited impassively for their death, believing that all remedies were ineffective, if not detrimental".[32] Unable to face cancer death in such a straightforward manner, other patients did cling onto the possibility of a cure, as remote as it might be. For all those who wondered what they could do, the medical marketplace offered a variety of options.

The cornerstone of clinical therapeutics was undoubtedly an operation, especially since the advent of cellular pathology, as seen in Chapter 2. Not only did clinicians see it as the sole means through which cancer cure could be achieved – even if it was rarely the case in practice – but also, consequently, as a dividing line between curable and incurable patients. On the other side of doctor-patient interaction, however, Spaniards diagnosed with a malignant condition that could be accessed by the scalpel usually dreaded the operation room and only envisaged it as a last resort. Inoperable patients, in turn, did not necessarily take the hopeless sentence of incurability as a final verdict about their illness. As can be inferred from Chapter 3, many patients prayed for their recovery. Asides from the Patron Saints of cancer, Christ and the Virgin Mary themselves were also regularly invoked. According to the Spanish press, a number of diseased country fellows who excelled in their moral integrity and behaviour did apparently regain their health through the miraculous intercession of a holy figure of Catholic religion.

In 1887, a contributor to the newspaper *La Unión* reported one such case. Having spent eight years prostrate in bed as a consequence of a stomach cancer that progressively spread to the breasts and the rib cage, with practitioners unanimously agreeing on the incurability of the illness through the resources of science, the devout Galician lady Balbina Zabala commissioned an image of the Sacred Heart of Christ and completely regained her health after an hour of ecstatic contemplation.[33] In 1895, the newspaper *El Siglo Futuro*

[32] González Olivares, "Clínica Quirúrgica", 113: 2.
[33] Un católico, "Curación milagrosa en Cangas", *La Unión,* 29th June, 1887, 1.

disseminated another case of miraculous recovery. This time, the cancer patient was a pious male who recounted his story in first-person, as follows:

> A cancer in the lips tormented the under signer, José Martí; the practitioners declared the indispensability of an operation, which, as it is known, is usually painful as well as uncertain in its results. Overwhelmed by the weight of my misfortune, I thought about turning to the Virgin Saint, beginning a novena in favour of *María Auxiliadora de los Cristianos*, and offering 15 *pesetas* in alms for the construction of the church that was being erected under the same name in Sarriá [Barcelona]. On concluding the novena, the cancer had completely disappeared. Vividly grateful to the Virgin Saint for such a miraculous cure, I wish for its publication … to prove once more the efficacy of the devotion to *María Auxiliadora de los Cristianos*.[34]

The occasional news of cases of holy intercession certainly reinforced the belief of other people with cancer in the possibility of regaining their health through Catholic faith. At the same time, it was also well known that these miraculous cures remained exceptional. Consequently, many patients looked for a third way of resistance to cancer death.

In the mid-1870s, a contributor to the weekly newspaper *El Periódico para todos* published a series of fragments of advertisements extracted from the back cover of a popular morning paper. One of these adverts read: "'Cancer'. It is cured radically, even the most rebellious – do not hesitate. *Doubt* is death; *faith,* life and health. Hurry up, cancerous [people]". Even if the piece was aimed at entertaining the readers (to the point of provoking a "loud laugh"), advertisements for allegedly unfailing remedies for cancer were not infrequent in the Spanish general press of the second half of the nineteenth century.[35] Their recurrence suggests that their authors had an audience, and patient testimonies confirm this. For instance, in November 1878, the students of the Surgery Clinic of Madrid who wrote down the clinical record of the 58-year-old cancer patient Francisco Pérez reported that he had previously made use of "an ointment that he says to be *miraculous*", with these

[34] José Martí, "Gracias a María", *El Siglo Futuro,* 4th January, 1895, 2.
[35] Antonio de San Martín, "La cuarta plana de un periódico célebre", *El Periódico para Todos,* 9th January, 1875, 7.

words describing the absolute confidence that the man initially put in the properties of the medicinal cream.[36]

More generally, after years of asking people diagnosed with cancer about the therapeutic plans they followed before seeking admission at the Clinical Hospital of Valencia, the surgeon Ferrer y Viñerta commented that his typical patient first attempted "to regain his health through private means, though he rarely achieves his aim, managing only to consume his savings without obtaining any satisfactory result", apart from worsening his condition.[37] Undoubtedly, the clinical practitioner was deploring the professional intrusion of empiricists and pseudo-practitioners. For instance, in 1875, he stated: "it is frequently observed that the individuals with an epithelioma of the lip seek the resources of science in a very advanced period of their illness and after having exhausted a thousand remedies that the common people or quacks recommend".[38] A few years later, it was also the shared view of his colleagues Federico Rubio, Rafael Ariza, and Serafín Buisen that, "up to now, laypeople [with cancer] have been better disposed to put their trust in such figures than in degree-trained practitioners".[39]

In a notable contribution to the book *Pain and Emotions in Modern History,* Moscoso pointed to the existence of a "moral economy of hope" in recovering from cancer. In his words, the term referred to "the cultural form in which pain and fear are counterbalanced by promises and expectations".[40] Whilst Moscoso developed a sound argument primarily through the illness case of Anne of Austria, married to King Louis XIII of France, he also conceded that the issue deserved further examination. The remaining part of this chapter aims at taking up the challenge. Firstly, it will delve into the main sources of emotional suffering that the Spanish people who faced cancer surgery experienced during the second half of the nineteenth century. The argument will then move on to

[36] Creus and Grinda, *Historias de la Clínica Quirúrgica (segundo curso) … 1878 a 1879*, 107.
[37] Ferrer y Viñerta, "Clínica Quirúrgica" [1872-73], 4.
[38] Ferrer y Viñerta, *Curso de Clínica Quirúrgica … 1874 a 1875*, 174.
[39] Rubio y Galí et al., *Reseña del segundo ejercicio del Instituto de terapéutica operatoria,* 51.
[40] Moscoso, "Exquisite and Lingering Pains", 31.

the analysis of the strategies through which empiricists and quacks managed to attract their clientele. Finally, it will present the context of social acceptance of these figures through the case study of the rise and fall of Doctor *Negro* and his alleged anti-cancer antidote in the late 1850s.

Facing Cancer Surgery

Between late December 1850 and early January 1851, the young physician Eusebio Castelo published a series of essays in the medical journal BMCF under the general title "Sobre el dolor en las enfermedades y principalmente en las operaciones quirúrgicas" ("On Pain in Diseases and Chiefly in Surgical Operations").[41] Departing from the usual focus of his colleagues, Castelo's interest was not the physical pain of the patients subjected to the sharp blade of the scalpel but the "moral pain" – that would be termed nowadays as emotional suffering – that many people with chronic conditions endured before, during, and after a surgical procedure. In his original view, "moral pain is for the psychologist the same as life for the physiologist: a real, positive, and evident fact" that could and ought to be studied.[42] Interestingly, Castelo chose the imaginary case of a woman diagnosed with breast cancer to structure his observations. Even if the scene was fictionalised, it aimed at condensing the experience of many real diseased people.

At first, the alarmed sick woman saw the persistent growth of a tumour in her breast and its resistance to "ordinary therapeutics"; namely, "some ointment, poultice, or water delivering her from her illness and from the horror of a bloody operation".[43] When she finally resolved to approach "a medical notability", she showed a "sad, dispirited" countenance, sometimes accompanied with "sighing"

[41] Eusebio Castelo Serra, "Sobre el dolor en las enfermedades y principalmente en las operaciones quirúrgicas. Artículo Primero", *Boletín de Medicina, Cirugía y Farmacia* 260 (22 December, 1850): 3-4; Eusebio Castelo Serra, "Sobre el dolor en las enfermedades y principalmente en las operaciones quirúrgicas. Artículo 2", *Boletín de Medicina, Cirugía y Farmacia* 261 (29th December, 1850): 4-6; and Castelo Serra, "Sobre el dolor en las enfermedades … Artículo III", 1-3.
[42] Castelo, "Sobre el dolor en las enfermedades … Artículo Primero", 3.
[43] Castelo, "Sobre el dolor en las enfermedades … Artículo III", 1-2.

in anticipation of what she conceived as “the final judgment about her illness, the last step to be taken to get away from the path leading her directly to the grave”. From the moment the practitioner sentenced “you have a cancer”, or announced, just as bluntly, “you need to have an operation”, the intimate conviction that she had tried to counteract by all means turned into an obsession. At a time in which a restricted use of chloroform and high post-operative mortality rates were still the norm, the patient was “continually seized by the sad presentiment of a martyrdom”, somehow echoing the experience of Saint Agatha, the young virgin of the early Christendom who had both breasts cut off, as seen in Chapter 3.[44]

During the days or weeks preceding the date in which the operation was scheduled, the life of the cancer patient was completely disturbed. As Castelo described, “this woman does not eat nor drink, nor sleep nor amble, nor does anything appropriately, constantly thinking of what she has to endure”. Meanwhile, the news of her state spread in and she received the visit of relatives, friends, and acquaintances, moved by either “compassion” or “curiosity”. Whatever their intention, the conversations that took place in the sick room were rarely as tactful as the heightened sensibility of the cancer patient demanded. As the physician re-enacted:

> One guest lavishes consolations based on vague and imprecise news, which brings all the terrible series of procedures that she herself had not even dare to imagine to the eyes of the poor woman; another foolishly pretends to praise her courage by showing his own weakness, stating that *he would let himself die if he was in the same situation*; a third has the carelessness of manifesting doubts regarding complete success, and still, there are barbarians who … refer to the groans and moans of another patient with profusion of detail … without refraining from giving the precision that she died … Finally, a *Do not worry, cheer up!… Courage!... It does not always go wrong… You are in good hands*, and a thousand bits of nonsense intend to remedy an evil that only health or death can scar over.[45]

Obviously, any of these shared views reinforced, rather than mitigated, the anticipated suffering of the cancer patient, leading her to envision over and

[44] Ibid., 2.
[45] Ibid.

over again the worst possible outcome; namely, exposing herself to surgical pain only to succumb from post-operative septicaemia. Having stated that, even the thought of a successful operation and its effective realisation was not enough to neutralise all source of anxiety.

On the one hand, awareness of the possibility of a relapse existed. As Castelo reported, cancer patients "always kept in mind the idea of a dubious result" and a number of them were so greatly concerned about the limited value of the scalpel against malignant conditions that they "asked a thousand times if the condition would reproduce itself".[46] On the other hand, in the best possible scenario, the woman was still "at least afraid of having to win back her health through … a permanent and deforming mutilation".[47] The dread of losing their physical attractiveness tormented many breast cancer patients, both at young and mature ages. In the novel *Fortunata y Jacinta,* published in 1887, the renowned realist writer Benito Pérez Galdós delved into this issue through the character of Ms Lupe, a middle-aged woman who designed a domestic prosthesis to conceal the fact that she had a breast amputated because of a *scirrhous tumour*. As the novelist described, Ms Lupe "supplied her missing part with a well-formed ball of raw cotton" so that, in her view, "at least, once dressed, she was good-looking".[48]

Aesthetic concerns were also particularly present in the case of operations of facial cancers. Aware of the emotional distress that disfigurement entailed, clinical surgeons were ready to propose, as far as possible, a second operation of plastic reconstruction. In the short-term, however, resigning to live with a facial deformity – as disturbing as it was – could be conceived as preferable to imagining oneself twice over in an operation room. This was the case, for instance, of the 60-year-old patient Tomás Villó. In 1875, he consented to the surgical excision of a *papillary epithelioma in the upper and lower lips* at the University Hospital of Valencia but "rejected categorically" a subsequent "cheilopasty" because "he did not want to suffer again".[49] A few years later,

[46] Ibid., 3.
[47] Ibid., 2.
[48] Benito Pérez Galdós, *Fortunata y Jacinta* (Seville: Facediciones, 2012 [1887]), 434.
[49] Ferrer y Viñerta, *Curso de Clínica Quirúrgica … 1875 a 1876*, 228.

the 62-year-old patient Antolín Sánchez equally refused a "rhinoplasty" to ameliorate the shape of the large scar consequent to the removal of his *epithelioma of the nasal region.* Nevertheless, he conceded that "he would think about it and, in case of making up his mind, he would come back" to the Clinical Hospital of Madrid.[50]

Depending on the seat of the lesion, the successful excision of a cancerous mass could also be at the cost of a permanent disability. For instance, in 1878, when a 40-year-old male printer diagnosed with an *epithelioma in the tongue* considered subjecting to the amputation of "the three front quarters of the left half of the tongue, its tip and its right front quarter", he could not ignore that the surgical procedure would necessarily entail irreversible difficulties for pronunciation, swallowing, and salivation.[51] In the mid-1890s, in turn, a 45-year-old man with initials A.S. whose *epithelioma of the leg* was "about 20 cm in length and 10 or 12 cm in width" had to envisage that the recommended amputation at the height of his knee would condemn him to aging as a crippled, dependent person.[52] More seriously, the amputation of the penis was commonly associated with suicidal attempts. As the surgeon Ferrer y Viñerta observed, "statistics present this operation as followed by a fatal ending for the sick people who endure it, because they cannot resign to the sight of their withered virility".[53]

Along with these sources of emotional suffering, many people diagnosed with cancer who were not wealthy enough to pay a private surgeon still had to overcome their revulsion towards a hospital stay. Even though the public healthcare system progressively spread to clusters of small towns during the second half of the nineteenth century, the state-funded medical services that

[50] Tapia, *Historias de Clínica Quirúrgica … 1877 a 1880*, 133.
[51] Ibid., 128.
[52] García y Tapia et al, *Historias de Clínica Quirúrgica (primer curso)* [1894-95], 305.
[53] Ferrer y Viñerta, *Curso de Clínica Quirúrgica … 1874 a 1875,* 92. Two decades later, a student of Surgery Clinic at the University Hospital of Madrid also commented, on the occasion of the medical case of a man diagnosed with an *epithelioma of the penis,* that "many patients who lack this organ commit suicide"; García y Tapia et al, *Historias de Clínica Quirúrgica (primer curso) [1894-95],* 21.

rural practitioners offered had their limitations.[54] With regard to the handling of tumours, specifically, Ferrer y Viñerta commented: "the difficult operations they require intimidate [these local] practitioners, who avoid their treatment, advising their poor patients to resource the hospital, and especially its [associated] clinic, in which they can benefit from the free assistance of the most credited professors".[55] Whilst the surgeon praised the "admirable effects of medical charity", it was also well known that the chronically ill avoided the separation from their family, the exposure to the myriad of sources of infection of a hospital ward, and the distinctive mark of poverty that hospital admission brought to their household for as long as possible.[56]

In 1855, González Olivares stressed that it was persistent severe pain that "made the weak [patients] decide to face the operation they had always rejected".[57] Half a century later, despite the popularisation of chemical anaesthesia, antisepsis, and asepsis, the conclusions of Leyden's national study on cancer still pointed to the patients' tendency to postpone an operation. For one thing, "[i]n many cases, the patients refused the operation at the time in which it was recommended, possibly with success". For another, "[i]t can also be observed that, when the patients sought the assistance of the physician, their cancer was in quite an advanced stage and, consequently, the operation was impossible".[58] In the meantime, outside the walls of clinical hospitals, a cohort of empiricists and quacks knew exactly how to appeal to the emotional suffering that cancer patients experienced, targeting the anxiety of those who pondered the risks of an operation as well as the despair of those who were told that there was nothing left to do except resign themselves to palliative care and prepare for an ineluctable death.

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[54] See, for instance, in relation to the region of Valencia, Carmen Barona, "Organización sanitaria y de la higiene pública en la provincia de Valencia (1854-1936)" (PhD thesis, University of Valencia, 2002).
[55] Ferrer y Viñerta, "Clínica Quirúrgica" [1872-73], 114.
[56] Ibid. For the patients' criticism to hospital medicine, see also Peset, "Clínica médica" [1872-73], 101.
[57] González Olivares, "Estudios sobre el cáncer", 74: 2.
[58] Leyden, *Relación de las investigaciones sobre el cáncer en España,* 20.

Pills, Ointments, Beverages, Powders

Within the medical marketplace, an operation was not simply one treatment amongst others. It was *the* treatment against which alternative remedies stood, as the advertisements published in the Spanish press often made explicit. For instance, in the mid-1850s, the back cover of the newspaper *El Áncora* advertised the *Ungüento Holloway* (*Holloway Ointment*) as a mixture of rare and precious balms which could cure all kinds of ulcers and sores, "no matter how rebellious and malignant their nature is; and even those terrible cases that have pertinaciously resisted to all type of procedures recommended by the most eminent surgeons".[59] Even more, a variation of the advert that was reproduced in *La España* claimed that many patients "unwilling to subject themselves to a painful operation" had regained their health through the use of the ointment and that "[n]o one [who believed in its properties] would be filled with despair about his or her state of health".[60] In short, these advertisements presented the *Holloway Ointment* as a panacea for both operable and inoperable cancer patients.

During the second half of the nineteenth century, the *Holloway Ointment* was the most persistently publicised remedy that was purportedly aimed at the cure of malignant neoplasms, amongst other conditions of obscure aetiology that proved resistant to therapeutics. In 1898, the newspaper *La Iberia* still regularly announced it as a "marvellous ointment" for the "infallible cure" of "cancers".[61] Throughout the decades under consideration, this topical substance was sold at the main chemists of the country – with the alternative possibility of purchasing it through correspondence – and its price was relatively affordable. For example, in 1866, the cost of a small medicine box amounted to seven vellon reals, which was the equivalent of about 2.5 kilograms of rice or dry beans in the retail food market of Madrid.[62] Considering all these

[59] "Ungüento del Profesor Holloway (de Londres)", *El Áncora,* 11th October, 1850, 16.
[60] "Remedio incomparable. Ungüento Holloway", *La España,* 23rd July, 1852, 4.
[61] "Píldoras y ungüento Holloway", *La Iberia,* 14th May, 1898, 4.
[62] For the cost of a small medicine box of the *Holloway Ointment,* see "¡Un remedio para los dolientes!", *La Época,* 30th January, 1866, 4. For the cost of the basic foodstuff in the provision market of Madrid at this time, see "Mercado de Madrid", *El Pensamiento Español,* 26th January, 1866, 4. The retail sale prices were expressed in

characteristics, added to the fact that it was advertised for domestic use, the *Holloway Ointment* was most possibly the remedy that the mentioned patient Francisco Pérez referred to when he stated that he had made use of a *miraculous* ointment.

Asides from this mixture of balms, a significant number of all-curing remedies – targeting patients with cancer amongst other intractable diseases – were regularly advertised in the Spanish general press. Between 1850 and 1855, the morning paper *El Clamor Público* announced the *Agua Catagmática* (*Catagmatic Water*), an Indian topical remedy allegedly "infallible" against gout, rheumatisms, pains, swellings, herpes, cancer, and any kind of sore and burnings.[63] For the following two decades, several newspapers publicised the *Rob Boyveau-Laffecteur* as a virtuous beverage "radically curing" cutaneous diseases, eczema, abscesses, syphilis, cancers, ulcers, asthma, scrofula, and scurvy.[64] Along with the *Píldoras de Moffat* (*Moffat Pills*)*,* the strengthening floor *Revalenta Arábiga* (*Arabic Revalenta*), and the *Polvos Divinos Antifagedénicos* (*Divine Antiphagedenic Powders*), these universal remedies shared a similar series of advantages in comparison with an operation: not only did they promise a cure, but they also offered a relatively painless self-administration without undesired aftereffects.[65]

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cuartos, with 1 *cuarto* being equal to 0.118 vellon reals. The quantity unit of the products, in turn, was expressed in pounds, with 1 pound being equal to 453.592 kilograms. Considering that the cost of 1 pound of rice oscillated between 11 and 12 *cuartos,* and the same quantity of dry beans was sold at a price ranging between 11 and 13 *cuartos,* someone who had 7 vellon reals was able to purchase up to 2.46 kilograms of rice or dry beans.

[63] "Agua catagmática", *El Clamor Público,* 13th September, 1850, 4. Following a keyword search in the digital archive "Hemeroteca digital" of the *Biblioteca Nacional de España,* the last time in which this remedy was announced in the Spanish general press as a cancer cure was on 8th April 1855, also in the newspaper *El Clamor Público.*

[64] "Rob yodurado de Laffecteur", *El Clamor Público,* 3rd October, 1855, 4. Listing more conditions, and still including cancer, see "Rob Boyveau-Laffecteur", *La Esperanza,* 7th January, 1870, 4. Following the procedure described in the preceding footnote, the last time in which the *Rob* was publicised as a cancer cure was on 6th January 1875 in the newspaper *La Época*.

[65] For the advertisement of the *Moffat Pills*, see "Avisos", *El Áncora,* 23rd July, 1850, 16. For the *Arabic Revalenta*, see, for instance, "La Revalenta Arábiga", *La España,* 27th August, 1854, 4. For the *Divine Antiphagedenic Powders*, see, amongst others, "Polvos divinos antifagedénicos", *La América,* 12th September, 1864, 20. Whilst the former remedy had an ephemeral existence in the Spanish general press, the two latter

In parallel to the sustained increase in the incidence of malignant neoplasms that took place in the last decades of the nineteenth century, walk-in consultations focusing on the cure of cancers and explicitly presented as competitors of hospital surgery also flourished in the major Spanish cities. In Madrid, for instance, the owner of a dispensary in 19, *Jesús del Valle* Street opening in 1884 advertised his services as follows: "Cancer. Ninety of every hundred cancerous operations relapse. In this clinic, we cure this condition without an operation, guaranteeing its non-reproduction".[66] In addition, his remedy was said to "disabus[e] the incurable patient".[67] In 1889, a Doctor Audet made use of a similar marketing plan through the claim that his *Medico-Cellular and Antiseptic Institute* had achieved "truly admirable cures [of cancer], even more worth of consideration as the region in which some of them were rooted made an operation impossible or extremely difficult".[68] Moreover, he assured that his treatment possessed "the great advantage of avoiding the annoyance, suffering, and complications of a bloody operation".[69]

According to contemporary clinicians, the use of a language of "self-assurance and conviction" was a major asset of the empiricists and quacks who publicised their anti-cancer remedies and services, as it contrasted radically with "the cautious language of doubt and self-restraint" that degree-trained practitioners usually adopted.[70] To reinforce their strategy of persuasion, these alternative healers often recurred to the additional resource of presenting cases of former cancer patients who regained their health thanks to their medicinal products. In this regard, the advertisement for the *Moffat Pills* ended with the following statement: "[s]ee the authentic letters of cured [people] accompanying the patient information leaflet".[71] In turn, the announcements of the *Arabic Revalenta* stressed the case of a Swiss Dr Gattiker who achieved the cure of

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were publicised as cancer cures for an eight-year-period (1854-62) and a ten-year-period (1864-74), respectively.

[66] "CANCER", *El Liberal,* 5th November, 1884, 4.

[67] "Cáncer, úlceras, enfermedades de la piel", *El Liberal,* 1st April, 1886, 4.

[68] "Instituto Médico Celular y Antiséptico", *El Liberal,* 23rd January, 1889, 6.

[69] Ibid.

[70] Rubio y Galí et al., *Reseña del segundo ejercicio del Instituto de terapéutica operatoria,* 51.

[71] "Avisos", 16.

a stomach cancer through the prescription of the fortifying floor.[72] Similarly, the publicity for the *Rob Boyveau-Laffecteur* highlighted that the French surgeon Philippe Ricord witnessed the cure of a cancer patient with initials M.A. who consumed the beverage.[73]

Overall, the emphasis on the proved efficacy of one or another of these supposed anti-cancer remedies could only appeal to the people whose ingenuity, anxiety, or despair clouded their capacity for critical reasoning. After all, neither the truthfulness of first-person testimonies of former cancer patients nor the identity and judgement of foreign practitioners were verifiable. Aware of this circumstance, the healers who established walk-in consultations in the capital of the country developed more sophisticated approaches to convince cancer patients of their medical competence. In 1886, a version of the advertisement for the dispensary located in 19, *Jesús del Valle* Street read:

> The best argument for a sick person being *the reality of the facts*, we proceed to review new clinical cases of cures achieved in this Surgical Centre *without an operation*. Mrs María Campos, nose cancer, two years of horrible suffering, radically cured. She can be seen at her residence, 15, *Corredera Alta*. – Mrs Manuela Rubio, cancer in the frontal region. She lives and resides in this city: 62, *Huertas* Street. – José López Fernández, cancerous pustule in the lip, *five years* of illness; resides in 3, *Redondilla* Street …. These concerned fellows, already radically cured, as many other [former patients] we could list … are ready to provide as many data and information required, for the benefit of suffering mankind.[74]

The owner of the walk-in consultation (whose name was never disclosed in the advertisements) not only described several cases of complete recovery from cancer but also invited sceptical diseased people, or their loved ones, to ascertain his honesty by visiting the former cancer patients whose full name and address was detailed.

Alternatively, other healers focused on the presentation of cases of cure of distinguished fellowmen, without failing to include the testimony of the former cancer patient himself – either in direct or reported speech – as well as the

[72] "La Revalenta Arábiga", *La España,* 10th September, 1854, 4.
[73] "Medicina práctica", *El Clamor Público,* 19th October, 1859, 4.
[74] "Cáncer, úlceras, enfermedades de la piel", 4.

corroboration of upright witnesses. The professional status and wealth of these patients and their community made it rather inconceivable that any of them would have an interest in becoming accomplices of a fraudster. In 1880, a Doctor Garrido recurred to this strategy to publicise the medicinal powders he administered in his dispensary, located in 6, *Luna* Street, Madrid. The advertisement for his services, published in the newspaper *El Clamor Público,* began with the following letter of the Captain-Major Carlos Sánchez Montes, which is worth quoting at length:

> To Dr Garrido: Dear Sir … during the months of April, May, and June of last year, I was feeling severely ill, as a result of *strong stomach pain, with frequent disgorgements …* without being able to find any kind of relief, despite the drugs, mineral waters, baths, and other remedies recommended by different physicians of this court, with the prognosis of one of them being … that my disease was A STOMACH CANCER. In such a situation, and following the advice of many friends, I decided to *go for broke;* I went to your consultation, to where I was driven in a carriage, as I was feeling *more dead than alive* … After the examination, I was prescribed your *Panacea and Stomach Powders*, with so much rightness that, a few days later, I already experienced a significant improvement and, today, I can assure you, my *dear Doctor*, that *I am completely recovered, eating with appetite* and dedicated to my job as attorney for the military government … In addressing to you my eternal gratitude and appreciation, I authorise the publication of my spontaneous and solemn expression, which several colleagues who have had the chance of observing the course of my illness and recovery corroborate with their signatures.[75]

The first-hand testimony of Sánchez Montes was effectively accompanied of the full name and position of up to eight fellow military servant leaders. Subsequently, Doctor Garrido himself expressed his gratitude to all "the under signers who certify and authenticate a truth"; namely, the efficacy of his remedy against diagnoses of stomach cancer.[76]

Some years later, the mentioned Doctor Audet used a similar tactic. This time, half an advertisement page in the newspaper *El Liberal* concentrated on the case of illness and recovery of Mr Latorre de Diego, a "rich landowner of [the

[75] Carlos Sánchez Montes and Francisco Garrido, "Dr. Garrido", *El Imparcial,* 8th January, 1880, 4.
[76] Ibid.

North Eastern province of] Soria".[77] When the distinguished patient sought the medical services of the Audet Institute, he showed "a widespread cancerous ulceration" in the face, which – as the patient reported – "had been diagnosed as such by the major eminences of Madrid", who offered no other therapeutic option than "a painful and long surgical operation, whose success could not be guaranteed at all".[78] Nevertheless, after two months under the care of Doctor Muela, the Institute specialist for cases of cancer, a healthy scar was visible on the patient's face. Authorised witnesses who followed his case, including "a multitude of incredulous physicians", yielded to the evidence and "hugged and congratulated" Doctor Muela.[79] Meanwhile, the patient himself claimed that the therapeutic plan he followed "was absolutely devoid of nuisance and, even more, of risk".[80]

None of the healers who advertised anti-cancer remedies in the Spanish press of the second half of the nineteenth century have gone down in history. This is not to say, however, that occasional cures of illnesses diagnosed as cancer over the course of these decades were not achieved. In most of the cases, the composition of the remedies marketed as infallible and non-harmful alternatives to an operation remained undisclosed, not allowing discernment between cases of empiricism and quackery. In a succinct approach, empiricists can be characterised as making their diagnoses in good faith and as recurring to substances possessing mild caustic and antiseptic properties, which were effective against a number of ailments. In contrast, quacks can be viewed as incurring in deliberate misdiagnoses and as sellers of a mixture of substances that they perfectly knew to be inactive against the disease they supposedly targeted. Still, a number of them managed to achieve an extraordinary – though ephemeral – reputation, as the case study of the rise and fall of Doctor *Negro* in the late 1850s will show.

[77] "Boletín del Instituto Audet", *El Liberal,* 18th August, 1889, 5.
[78] "Boletín del Instituto Audet", *El Liberal,* 25th August, 1889, 5.
[79] "Boletín del Instituto Audet", 18th August, 5.
[80] "Boletín del Instituto Audet", 25th August, 5.

"A Quack comme il faut*"*

On 26th November 1859, the newspaper *El Clamor Público* disseminated the news of the demise of Saturnina Moso, the wife of the Spanish deputy, businessman, and bull rancher Nazario Carriquiri. The fatal ending had occurred in Paris as a result of a long-lasting breast cancer and, as the reporter highlighted, "despite all that her loving life partner has done, offering the famous Doctor *Negro* the most generous donations to snatch this victim away from death".[81] Two months earlier, the spouses had put their last hope in a journey to the French capital so as to try the "*quinine* of cancer" advertised by this healer, who was nicknamed after his Javanese origins and the consequent dark colour of his skin.[82] Asides from the cost of the trip, the desperate husband had been willing to pay more than twenty thousand French francs for his medical services.[83] As a usual follower and occasional subject of the Spanish press, it is unlikely that Mr Carriquiri ignored that, at the time, the figure of Doctor *Negro* was involved in controversy for accusation of fraud. Even so, he came to the decision that the financial and emotional investment was worth the try.

The intimate reasons that resolved the Carriquiri marriage into packing their suitcases and exposing themselves – and specially her – to a long, tiring, and risky trip are as obscure as the medical advices that she might have received and followed beforehand. Nevertheless, the monitoring and evaluation of the rise and fall of Doctor *Negro* in the Spanish press can shed much light on the thoughts and feelings that the spouses possibly shared. A significant number of newspapers, including *La España, La Esperanza, La Época, La Patria, La Corona,* and *El Museo Universal* followed the case with interest, with a majority of articles being published during the months of March and April 1859. Considering the information they provided, Doctor *Negro's*

[81] J. de Granda, "Crónica Extranjera – Señora de Carriquiri", *El Clamor Público,* 26th November, 1859, 3.
[82] For the period of time that the Lady of Carriquiri spent under the therapeutic care of Doctor Negro, see Pedro González Velasco, "Los curanderos – Entrevista con el doctor Negro", *El Siglo Médico* 311 (18th December, 1859): 1. For the name of Doctor Negro's alleged remedy against cancer, see N. García Sierra, "Variedades", *La Esperanza,* 17th January, 1860, 4.
[83] González Velasco, "Los curanderos", 1.

prestige relied on different agents: firstly, the cancer patients that he purportedly cured, which were apparently huge in number and included renowned international figures; secondly, the endorsement of the Imperial government of Napoleon III; thirdly, the enthusiasm of the Parisian high-society; and, last but not least, the disposition of the Spanish journalists themselves to believe in his honesty and genius.

On 1st March 1859, a reporter of *El Museo Universal* announced that dozens of people with cancer who had heard about the infallible remedy of a Doctor *Negro* had travelled from distant places to Paris so as to consult with him, and had quickly regained a complete state of health. As the article read: "cancerous people come from everywhere to knock on the doors of the Javanese doctor, who dispenses his antidote and leaves them cured in a short period of time".[84] The case of illness and recovery of the Belgian inventor of musical instruments Adolphe Sax especially concentrated the attention of the media, as his international reputation distanced him from any suspicion of complicity with a fraudster. According to the newspaper *La España,* when Mr Sax first sought for the services of Doctor *Negro,* "he was already abandoned by medicine, and nearly dying" as a result of a lip cancer.[85] After trying the remedy of the foreign doctor, not only did he obtain a "complete cure" but also, apparently, a recovery without any visible trace of facial damage. Considering that, "currently, Mr Sax does not show the slightest scar", a Spanish journalist even qualified the achievement as a "miraculous cure".[86]

On the basis of the news of this and other cases of alleged cure of cancer patients, which contrasted dramatically with the poor statistics that the most reputed Western European practitioners were able to obtain through a fearsome operation, an "imperial decree" authorised Doctor *Negro* "to practice medicine in the branch of cancers" in the French territory for a whole year.[87] Instead of distrusting him for lacking a formal qualification as a physician, the government of Napoleon III gave his activities official support. As an immediate

[84] Nemesio Fernández Cuesta, "Revista de la quincena", *El Museo Universal,* 1st March, 1859, 7.
[85] Manuel Rodríguez, "Notabilidad negra", *La España,* 1st March, 1859, 1.
[86] Manuel Rodríguez, "Cura milagrosa", *La España,* 3rd March, 1859, 1.
[87] Fernández Cuesta, "Revista de la quincena", 7.

consequence, the Javanese doctor became the new shining star of the Parisian high-society. Towards the end of March 1859, a journalist of *La España* reported: "the name of Doctor *Negro* … runs by word of mouth amongst the most elegant and *fashionable* Parisian elites". Moreover, he was the object of "admiration" in a banquet congregating "the crème de la crème of the French intelligence and inventiveness", to the point that the Baron Isidore Taylor addressed to him, "in the name of the Western world, a warm discourse, welcoming the Asian and congratulating himself that the Orient had sent Europe its most prodigious elixir". [88]

Far from disseminating neutral information, the Spanish journalists who followed the rise of Doctor *Negro'*s fame participated in the collective wave of enthusiasm that was spreading above the Pyrenees. A number of opinions and arguments showing their confidence in the Javanese doctor and his antidote against cancer are specially worth mentioning, as they possibly influenced or coincided with the desires and expectations of the Carriquiri marriage, along with the thoughts and feelings of other Spanish people afflicted with cancer. Such was the case, for instance, of Miguel Belza, an ex-managing director of government monopoly revenues. On 12th March 1859, the newspaper *La Época* announced that the wealthy man had taken the decision of travelling to Paris "to consult with the famous Doctor *Negro* about a cancer in his mouth". Immediately after, the author of the news manifested his own conviction about the rightness of the therapeutic choice. As he stated, "[t]he prodigious cures of Mr Vriès [which was the real surname of the Asian doctor] give us confidence in believing that Mr Belza will find a relief for his terrible condition". [89]

At the time in which the Spanish civil servant resolved to go to Paris, the national press had not eluded mentioning the scepticism with which French degree-trained practitioners received the remedy of Doctor *Negro*. In the early days of March 1859, a contributor to the newspaper *La España* reported that the eminent practitioner Alfred Velpeau, "quite incredulous" about the true nature of the diseases that the Javanese doctor healed with his alleged anti-

[88] Manuel Rodríguez, "El doctor Negro", *La España,* 26th March, 1859, 1.
[89] Juanco, "Noticias generales", *La Época*, 12th March, 1859, 4.

cancer remedy, had challenged the newcomer to cure twelve patients of the Parisian hospital *La Charité* who were "really suffering from cancer". Still, the author of the article also stressed that Doctor *Negro* had "immediately accepted" the offer, thus portraying a self-assured man who was desirous to dissipate any doubt about his professional integrity.[90] Moreover, less than a month later, a willingness to believe in the discovery of an infallible cure for cancer made the same journalist transform his previous narration of facts. In the new version of the story, Velpeau had invited the Javanese doctor to use his therapeutic plan in his hospital because he was "convinced of the science or the efficacy of Vriès' elixir".[91]

So great was the enthusiasm of the reporter about Doctor *Negro* that he even designated him as a "suntanned Hippocrates" and a new "Galen", thus extolling the Asian healer as a new founding father of medicine. To sustain his defence of Mr Vriès, the journalist also resourced imaginative arguments, like an orientalist characterisation of his continent of origin, in which an all-powerful nature was seemingly as capable of causing the worst possible deaths as of providing the means of curing the most rebellious diseases. As he stated, in an evocative description:

> In Asia, where the brighter flowers [and] the plants with more powerful vegetation contain in their stems the most subtle poisons; where epidemic conditions are all united; where the wildest diseases conspire against human nature; where venomous insects are here, there, and everywhere; where the very juice of the trees is lethal; where the sun annihilates with its rays; death is very common … man ends up getting used to it, finding it familiar, unveiling its secrets. In this context, what can be strange in Doctor Vriès obtaining his secret [remedy] from death itself? [92]

With regard to the persistent criticism of the medical profession, including the refutation of new cases of cures, the journalist wondered: "[m]ay it be that

[90] Rodríguez, "Notabilidad negra", 1.
[91] Rodríguez, "El doctor Negro", 1. For the version of the story of Alfred Velpeau himself, which coincided with the news disseminated in the Spanish press at the beginning of March 1859, see Alfred-Armand-Louis-Marie Velpeau, *Expériences sur le traitement du cancer instituées par le sieur Vriès à l'hôpital de la Charité sous la surveillance de MM. Manec et Velpeau. Compte rendu à l'Académie Impériale de Médecine le 29 mars 1859* (Paris: J.B. Baillière et fils, 1859).
[92] Rodríguez, "El doctor Negro", 1.

the ointment of Doctor *Negro* has already lost its virtue?". Considering his assumption that the cures of Mr Sax, along with a famous Russian dancer and other celebrities were "a fact", the question pointed literally to the possibility that the healing properties of the anti-cancer remedy might fade naturally with time, thus imposing frequent travelling back to Asia so as to pick up fresh "miraculous herbs".[93]

On 30th March 1859, *La España* published a series of breaking news about the medical activities of the Asian healer that abounded in his disrepute. All of a sudden, the confidence in Doctor *Negro* seemed to decline as quickly as it had risen. Asides from the failure to achieve the cure of a single patient at the hospital *La Charité* after two months of treatment (apparently, one of them was already dead, four others were feeling worse, and the rest had not experienced any kind of improvement), a chemical analysis of his alleged "marvellous panacea" revealed that it merely contained "saltpetre" and "aloe". Even more, a Mr Levy who had been reported cured was actually dead. Finally, the Javanese doctor had tried to charge the exorbitant sum of forty-five thousand French francs to the mentioned Mr Belza, who had consequently refused his services. On this basis, the journalist concluded that Doctor Negro was "a quack *comme il faut*"; that is, the perfect incarnation of a fraudster.[94] The Imperial Academy of Medicine, in turn, agreed unanimously that his experiments at *La Charité* had to be immediately discontinued.[95]

Despite all these accusations, and as incredible as it may seem, the media condemnation of Doctor *Negro* lasted less than a week. On 4th April 1859, the chief editor of the newspaper *La Patria* already presented a series of statements in his defence.[96] First of all, he deplored that the Imperial Academy of Medicine, at the initiative of Velpeau, had taken the decision of expelling Doctor *Negro* prematurely from *La Charité*. When the Asian healer accepted the challenge of treating twelve hospital cancer patients, he asked for a six-month

[93] Ibid.
[94] Manuel Rodríguez, "Acabó su reinado", *La España,* 30th March, 1859, 1.
[95] Manuel Rodríguez, "Ya puede buscar otra industria", *La España,* 9th April, 1859, 1.
[96] Juan Álvarez, "El informe del doctor Velpeau", *La Patria,* 4th April, 1859. The article was reproduced under the title "El informe de M. Velpeau" in *La Corona,* 7th April, 1859, 3-4, which is the source quoted in text.

due date, and his request was accepted. Consequently, Velpeau was to blame for reneging on a "solemn promise". The abrupt ending of relations was even less acceptable if considering – in contradiction to the news disseminated a few days earlier – that the decision was taken "despite the fact that none of the cancerous [people] that Mr Vriès had taken under his care have died". Another aspect that was in question, according to the journalist, was the claim that "the vegetal substances used were inactive" against cancer. In his view, "in the current state of science, no chemical analysis can truly demonstrate the efficacy or inefficacy of any of these substances". [97]

At this point, the Spanish people who followed the case of Doctor *Negro* through the press possibly experienced confusion about the disparity of information received. In the following weeks, however, new articles allowed benevolent readers, and specially those in need of maintaining their hope in the possibility of a cancer cure without an operation, to redress the balance in favour of the healer. A first argument came through a letter of Mr Belza published on 14th April 1859 in *La España.* For one thing, the cancer patient confirmed that Mr Vriès had asked him to pay forty-five thousands French francs for the treatment. For another, he also explained – following the apologies of the Javanese doctor – which the unfortunate episode only occurred because, "as busy as he was, he mixed up my case with the file of another patient". Once the misunderstanding was clarified, Mr Belza began the treatment as planned, and manifested to be "not dissatisfied, for the time being".[98] Two weeks later, *La España* also reported a new case of cancer cure. On this occasion, the patient was an Austrian baroness who had previously consulted, in vain, "the most reputed physicians, including Velpeau".[99]

After the succession of news about Doctor *Negro* that were published in the late winter and early spring of 1859, the Spanish press kept silent about the Asian healer until mid-July. At that time, *La España* announced that a jury had condemned him to return two thousand French francs for the assistance of

[97] "El informe del doctor Velpeau", 3.
[98] Manuel Rodríguez, "El negro se rehabilita", *La España,* 14th April, 1859, 3.
[99] Manuel Rodríguez, "Esta es más negra", *La España,* 28th April, 1859, 1.

a patient who died.[100] Nevertheless, this last disappointing news neither provoked Mr Belza to discontinue the use of the *quinine* of cancer, nor did it prevent Nazario Carriquiri to embark his spouse on a trip to Paris in order to meet the Javanese doctor in September 1859.[101] As controversial as the figure of Mr Vriès was, the two Spanish countrymen, along with other patients who refused an operation or had been declared inoperable, were more willing to tolerate uncertainty, if not self-delusion, than despair. For those who needed to keep faith, the death of a single patient did not necessarily invalidate the virtue of the anti-cancer antidote. After all, the blame might be found in misbehaviour of the patient, or in a specific and rare form of the malignant condition that was not amenable to treatment. The negative news could be deemed as distorted or conveniently dismissed from the mind.

It was not until 12th January 1860, about six weeks after the death of Saturnina Moso de Carriquiri, when the figure of Doctor *Negro* definitely fell into disgrace. Following a two-day trial under a general accusation of fraud, the Criminal Court of Paris sentenced Mr Vriès to fifteen months of prison.[102] Afterwards, the only times he appeared again in the Spanish press was to be presented as an exemplary model of quackery. Interestingly, one of the earliest mentions of Doctor *Negro* that followed the verdict of the French justice regarded the announcement of a new alleged cure for cancer. On 18th January 1860, a journalist of *La España* commented:

> The discovery of a remedy curing cancer is the source of much talk. It could be an illusion that eventually turns to disappointment; but it does not have the same traces of fraudster quackery than the case of Doctor *Negro*. The inventor is a clergyman from London (the reverend Hugh Reed, priest of the Holy Sepulchre), and experiments are being made to see if they corroborate what has been announced about some patients.[103]

The case of the rise and fall of the reputation of Doctor *Negro* had a circular ending. As soon as a fraudster was moved away from the lucrative business of

[100] Manuel Rodríguez, "Su fama se eclipsó", *La España,* 14th July, 1859, 2.
[101] Mr Belza remained under the care of Doctor *Negro* at least until December 1859. See González Velasco, "Los curanderos", 1.
[102] "Telegramas de la Gaceta", *El Clamor Público,* 15th January, 1860, 2.
[103] "¿Qué dirá el doctor Negro?", *La España,* 18th January, 1860, 2.

intractable illnesses, a new incarnation of hope in achieving the cure of malignant conditions emerged, with a legion of authorised voices willing to take a favourable stance on the healer and a number of patients ready to embark on a therapeutic journey that offered a chance to escape a dreaded form of death.

CHAPTER 6

BIOGRAPHY

II.6.1. Singularity

Together with the interpretation of symptoms and the disease label, a critical reflection on affective memories, self-image, and long-term expectations was intrinsic to the process of living through a chronic and deadly illness like cancer. Often, those in the sick person's close circle also exerted a notable influence in his or her illness-related musings and decisions. These aspects of the experience of cancer, which have only appeared marginally in previous chapters, will now be explored more thoroughly. Besides giving close attention to a new analytical level of illness meaning, this final chapter will adopt a distinct methodological approach, with the ultimate goal of presenting cancer narratives proper. So far, medical and institutional conditions, along with widely shared socio-moral beliefs and attitudes, have been assembled with the fragmentary pieces of a myriad of illness stories, in search of regularities. Now, the object of enquiry moves towards the opposite pole; that is, exploring the detail of a few individual cases to distinguish the contours of their singularity.

The analysis concentrates on three historical figures that received a diagnosis of cancer during the second half of the nineteenth century. The first case study, which focuses on the last year and a half of the Spanish progressive politician Joaquín María López's life (1798-1855), best illustrates how a number of objectifications of the experience of cancer presented throughout this thesis became intertwined with elements of a personal, family, and professional trajectory in a unique concatenation of events, with a beginning, an ending,

and an underlying interpretation. From the moment López first noticed a minor anatomical alteration to the day he died, the possible ways in which he could live through his malignant illness were necessarily framed within the cultural patterns available to a person of his time and place, be it to agree with, reject, or re-signify them. An in-depth exploration of his successive thoughts, feelings, and behaviour will finally allow assessing the common and the particular, the collective and the singular, the shared and the specific, in an individual cancer narrative.

In large part, López's process of coming to terms with his malignant condition can be approached through a biography that Fermín Caballero, a close friend and political colleague, wrote in the aftermath of his death. This work, titled "Vida del Excmo. Sr. Don Joaquín María López" ("Life of the Hon. Esq. Mr Joaquín María López"), was intended as a tribute to the memory of his beloved companion.[1] However, it was far from apologetic when it described López's moral weaknesses and illness behaviour. Caballero retold the events just like he knew and felt them, to the extreme of showing repentance for his sincerity. As he conceded, almost two decades later:

> [P]erhaps too inclined to a judgemental attitude, I go too far in condemning flaws that should be concealed, as nobody lacks them. Amongst the motives that trouble my consciousness in this respect, I remember that, when I published the life of my particularly devoted [friend] Joaquín María López, I emphasised both the great faults and the great qualities. Reading that book, a talented Andalusian Lady said … that she would not like such a ruthless friend to honour her [memory].[2]

Several writings by the sick man himself – including letters, a drafted autobiography, and testamentary dispositions – corroborate Caballero's testimony and add significant richness to the account. Archival ego-documents, news published in the general press and, last but not least, a preserved tongue currently on display in López's hometown, provide complementary insights into his experience of cancer illness.

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[1] Fermín Caballero, "Vida del Excmo. Sr. Don Joaquín María López", in *Colección de discursos parlamentarios, defensas forenses y producciones literarias de Joaquín María López,* Vol. 7, ed. Feliciano López (Madrid: Imprenta de Manuel Minuesa, 1857).
[2] Fermín Caballero, *Biografía del Doctor Don Vicente Asuero y Cortázar* (Madrid: Imprenta de la Viuda de Aguado e Hijos, 1873), 9-10.

The second and third case studies move towards Victorian England, to examine the respective last known portraits of Ada Lovelace (1815-52), known as the only legitimate daughter of the poet Lord Byron, as well as celebrated today as the first computer programmer; and the diarist Alice James (1848-92), who was the youngest sibling of the philosopher William James and the novelist Henry James. Even though the James' family was from the US, Alice settled in London in 1884 and remained there up until her death. Before anything else, the decision of displacing the focus of attention outside of the Spanish context deserves clarification. The experience of cancer illness was by no means incommensurable across Western European countries. In the absence of a rigorous comparative analysis, it is nonetheless questionable to pretend that Ada and Alice's stories can be assessed in the same manner as López's. The purpose is different, however. Above all, a succinct approach to their respective illness biographies will substantiate the view that cancer narratives could also be conveyed through visual form.

Slightly less than four decades apart, both Ada and Alice decided to have their portrait taken upon the conviction that they had a fatal illness; a painting for one, a photograph for the other. In each case, the pictorial image stood as the outcome of a personal process of acceptance that they would face a slow, inevitable death. Neither of them expressed their state of mind straightforwardly. As will be shown, all meaning lay in the gap between the description of the portrait and the rhetorical function it was intended to serve. The approach taken in this chapter follows that of cultural historians who analyse works of art. Notably, in her book *The Look of the Past: Visual and Material Evidence in Historical Practice*, the British scholar Ludmilla Jordanova argued that these shall never be regarded as "autonomous, self-evident, and transparent" objects.[3] Furthermore, Moscoso recently stated that "pictorial expressions can be understood not as literal accounts of experiences, but rather as indications of the evaluative, intellectual, and emotional factors that modulate different forms of life".[4]

[3] Ludmilla Jordanova, *The Look of the Past: Visual and Material Evidence in Historical Practice* (Cambridge: Cambridge University Press, 2012), 26.
[4] Javier Moscoso, "From the History of Emotions to the History of Experience", 187.

In contrast with López's contemporary biographers, who only mention that the politician developed a cancer in passing, the chroniclers of the life of Ada Lovelace have already delved into her family archive – kept at the Bodleian Library, in Oxford – to retrace episodes of her malignant illness. Most notably, the historians Doris Langley Moore, Dorothy Stein, and Betty Toole have quoted Ada's correspondence with her mother and husband (catalogued as "Somerville Papers" and "Lovelace Papers") at length, as well as the diary that Lord Lovelace himself wrote during the last months of his wife's illness ("Lord Lovelace's Journal").[5] The analysis presented in this chapter draws on published archival material and scholarly observations scattered throughout these works. Nevertheless, it adopts a distinctive approach in presenting Ada's last known portrait as the expression of a singular process of coming to terms with cancer death. Even if Stein already included a reproduction of this likeness in her biography of the Victorian woman, she considered it as a mere illustration instead of as a proper object of analysis.

Similar considerations apply to the case study of Alice James. The unique meaning conveyed through her last known portrait is examined through primary evidence and scholarly interpretations gathered from several existing contributions. During the last five years of her life, Alice kept an intimate journal that the literary critic and biographer Leon Edel edited and published under

[5] Doris Langley Moore, *Ada: Countess of Lovelace, Byron's Legitimate Daughter.* (London: John Murray, 1977); Dorothy Stein, *Ada, a Life and a Legacy* (Cambridge, Mass. and London: The MIT Press, 1985); Betty A. Toole, *Ada, The Enchantress of Numbers: A Selection of Letters* (Mill Valley, CA: Strawberry Press, 1992). Other academic investigations have explored aspects of Ada Lovelace's life. Even if they do not include additional archival research that is relevant for exploring her visual cancer narrative, their existence deserves to be mentioned; John Baum, *The Calculating Passion of Ada Byron* (Hamden, Connecticut: Archon Books, 1986); Roy Porter and Dorothy Porter, *In Sickness and in Health: The British Experience 1650-1850* (London: Fourth Estate, 1988), 225-228; Alison Winter, "A Calculus of Suffering: Ada Lovelace and the Bodily Constraints on Women's Knowledge in Early Victorian England", in Christopher Lawrence and Steven Shapin (eds.) *Science Incarnate: Historical Embodiments of Natural Knowledge.* (Chicago: University of Chicago Press, 1998); Benjamin Woolley, *The Bride of Science: Romance, Reason, and Byron's Daughter.* (Basingstoke and Oxford: Macmillan, 1999); Ilana Löwy, *A Woman Disease: The History of Cervical Cancer.* (Oxford: Oxford University Press, 2011); James Essinger, *A Female Genius: How Ada Lovelace, Lord Byron's Daughter, Started the Computer Age* (London: Gibson Square, 2013); James Essinger, *Ada's Algorithm: How Lord Byron's Daughter Ada Lovelace Launched the Digital Age Through the Poetry of Numbers* (London: Gibson Square, 2014).

the title *The Diary of Alice James.*[6] In addition, the historian of literature Ruth Bernard Yeazell compiled a selected correspondence of the youngest sibling of the James' family. This work was accompanied by an introductory biographical essay and a number of illustrations, including a reproduction of the aforementioned photograph.[7] Complementary insights into Alice's visual cancer narrative can also be found in other letters that she exchanged with her brother William. These ego-documents have been published in Ignas K. Skrupskelis and Elizabeth M. Berkeley's seventh-volume of *The Correspondence of William James*, which corresponds to the five-year-period 1890-94.[8]

II.6.2. Joaquín María López

The Meanings of a Tongue

Joaquín María López was born in 1798, in a family of illustrious ancestry established in Villena, a locality of the province of Alicante, close to the Mediterranean coast. His privileged background gave him the opportunity to study philosophy and law in his youth. Soon, he stood out amongst his classmates for his outstanding qualities as a public speaker. Before his university studies were finished, he had already taught several subjects to his younger colleagues. Later on, he alternated a successful professional practice as a lawyer with a career in politics within the left-wing *Partido Progresista* (Progressive Party). During the regency of the under-aged Queen Isabel II (1834-43), he was elected deputy in several legislatures,

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[6] Leon Edel, *The Diary of Alice James* (Harmondsworth and New York: Penguin Books, 1982 [1964]).

[7] Ruth Bernard Yeazell, *The Death and Letters of Alice James: Selected Correspondence* (Berkeley and Los Angeles: University of California Press, 1981). Other works on the life of Alice James that go beyond the focus of analysis of this chapter include Jean Strouse, *Alice James: A Biography* (London: Jonathan Cape, 1981); and Susan Sontag, *Alice in Bed: A Play in Eight Scenes* (London: Vintage, 1994).

[8] Ignas K. Skrupskelis and Elizabeth M. Berkeley, eds., *The Correspondence of William James, Vol. 7, 1890-1894* (London and Charlottesville, VA: University Press of Virginia, 1999).

served as the head of different ministerial departments, and even as Prime Minister for a few months. In the following years, he also held positions as member of the Senate and as Attorney General. At a time of high instability in Spanish national politics, with regular episodes of government overthrow, both his political allies and adversaries recognised him for his eloquence.[9]

In the late 1980s, López was granted the posthumous title of favourite son of his hometown. At the same time, arrangements were made for a number of his personal belongings to be donated to the town council. For over a century, his descendants treasured a silver snuffbox, an amber pipe, a pair of glasses, a coffee set, a military costume and, last but not least, a family relic that was rarely shown to strangers: the tongue of their ancestor, preserved in a solution of formaldehyde within an airtight glass jar.[10] These objects are exhibited today in a permanent display cabinet located on the first floor of Villena's local theatre.[11] Despite its small size, it is this body part that attracts most attention. Within the setting, it serves the rhetorical function of a synecdoche; that is, the tongue stands for the oratorical skills that gave the prominent local fellow national renown **(Figure 6.1)**. A metal board informs the visitor that López was nicknamed "pico de oro" ("the gift of the gab") and that, as the legend would have it, it was Queen Isabel II herself who ordered his tongue to be preserved after his death on 14th November 1855.[12]

[9] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 17-162.
[10] Juan Bautista Vilar, foreword to *Joaquín María López: un líder liberal para España. Su vida y obra política,* by Vicente Prats Esquembre (Alicante: M.I. Ayuntamiento de Villena, Caja de Ahorros Provincial de Alicante y Valencia, Caja de Ahorros del Mediterráneo, 1991), 14.
[11] "El legado de Joaquín María López, a disposición de villenenses e investigadores", *El Periódico de Villena,* 5th September, 2014, accessed 29th July 2017, http://www.elperiodicodevillena.com/noticia.asp?idnoticia=87261.
[12] The metal board reads: "Tongue of Joaquín María López, who was nicknamed "pico de oro" and which, according to the legend, H.M. Isabel II ordered to preserve. Donation: Mrs Carmen Turpín, widow of López & Sons".

Figure 6.1 *Tongue of Joaquín María López*, 1855, preserved in a solution of formaldehyde, within an airtight glass jar of 12 x 5,8 cm (including the glass lid), *Teatro Chapí,* Villena, Alicante, Spain. Photographed by Fanny H. Brotons, with permission of the Muy Ilustre Ayuntamiento de Villena.

Moving from analysing the rhetorical function of the object to simply describing it confronts the attentive observer with a paradox. The acclaimed public speaker turns into a mute sick man, whose human remains could have been perfectly displayed in a museum of anatomical pathology. In comparison with a specimen of normal anatomy with a roughly similar antiquity and technique of conservation, the tongue of the Spanish orator is noticeably small in size and irregular in shape **(Figure 6.2)**. These distinctive features are suggestive of a serious disorder in the organ of speech. Whilst the memorial omits all mention of the circumstances of López's death, other evidence confirms this suspicion. According to the biographer Fermín Caballero, the tongue of his old friend "was falling to pieces" shortly before his death.[13] Moreover, López's death

[13] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 232.

certificate specified that he had a "cancer of the tongue".[14] In light of this evidence, this body part becomes Janus-faced: it represents the instrument of this man's glory as much as the seat of the illness that left him speechless, and took him prematurely to the grave.

Figure 6.2 *A tongue with the blood vessels minutely injected to show its vascularity,* ca. 1760-93, wet preparation of tissue mounted in a circular glass jar of 12,6 x 8,4 cm, Hunterian Museum, London, UK. Reproduced with permission of © The Hunterian Museum at the Royal College of Surgeons.

At the time of López's death, neither his circle of intimates nor his ideological opponents failed to establish a connection between the two facts. As might be expected, they all interpreted it to be the Lord's will. The young student of law Benito Gutiérrez, who was his protégé and looked after him during his last weeks of illness, struggled to make sense of the divine intention. In a long obituary published in the progressive newspaper *La Nación*, he praised his mentor as "the greatest orator in Europe" and as "a Cicero of the Modern

[14] Ibid., 363-364. A transcript of the "Death certificate" of López was included in the book. The original document was kept in the Parish Church of San Martín, Madrid.

times". Hence, in considering that the fatal illness struck him precisely in the tongue, the heartfelt pupil could not refrain to exclaim: "Cruel death! What did it seek from your torture!".[15] Caballero, in contrast, had a clear answer to the question. As he put it, their beloved friend expired as a "lucid penitent".[16] Whilst López's long-term confidant adopted a critical but sympathetic perspective, other commentators possessed a merciless opinion. In the view of the editors of the Catholic and reactionary newspaper *La Esperanza,* the orator died "*from where he had sinned*", with no hope of salvation.[17]

The moral accusation was twofold in its meaning. As a member of parliament, López indefatigably advocated against the power and privileges of the Catholic Church. Amongst other issues, he supported the freedom of consciousness, the expropriation of ecclesiastical properties, and the abolition of the tithe. In all likelihood, radical conservatives saw his illness as an expression of divine justice against a silver-tongued devil. Others, like Caballero, shared a common progressive project for Spain, in which the limitation of the Church's entitlements was compatible with the strict observance of Christian duties. In this regard, López's biographer portrayed his friend as a charitable and compassionate citizen. Much to his consternation, however, the orator also had a well-earned notorious reputation as a seducer of women.[18] In Caballero's words, his extramarital affairs "led him to embarrassing scenes, dishonourable actions, matters of censorship, and deplorable anecdotes".[19] This succession of irreligious episodes damaged not only his public image but also, and irreparably, his family relations.

Over the course of his final illness, López maintained the ideological convictions that he zealously defended as a public representative. Conversely, he dedicated some time to re-evaluate his past history of remorseless adultery. Looking back on his life whilst he dealt with the persistent resentment of his wife and children was not an exercise devoid of suffering. In the introduction to his

[15] Benito Gutiérrez, "Al Excmo. Señor Don Joaquín María López. Despedida". *La Nación,* 16th November, 1855, 1-2.
[16] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 190.
[17] "Parte no oficial", *La Esperanza,* 22nd November, 1855, 3.
[18] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 187-190.
[19] Ibid., 251.

memoirs, which were evocatively titled *Mis horas de recuerdos* (*My Time of Remembrance*), he wrote: "[w]hen a man reaches this stage of natural or premature old age, he mechanically revisits his past …. This silent entertainment usually goes along with the groans of pain".[20] So great was his burden that the sick man avoided any inner moral conflict for the longest possible time; so much so, that his manuscript remained largely unfinished. A chronological approach to López's experience of cancer allows probing into his struggle to come to terms with his past. At the same time, it is revealing of how individual thoughts, feelings, and behaviour intertwined with the cultural patterns examined throughout this thesis.

Facing Ahead

In the month of April 1854, López started to feel some discomfort in his tongue.[21] At first, this was only an occasional nuisance, and he gave it no importance. As Caballero noted, his friend considered the issue as "simple and insignificant", and he attributed its origins to a mechanical cause, be it "the transient effect of a bite or an excessive use of cigars". Unexpectedly for him, however, the discomfort persisted. Moreover, it was not long before new symptoms appeared. By October 1854, his biographer recalled, the tongue was "notably swollen" and an "induration" was palpable.[22] In the course of six months, López's initial disregard for an apparently minor alteration turned into a growing concern for a chronic ailment, especially considering that he depended on his loquacity for his job as a lawyer. In this earliest stage of illness, the sick man's behaviour replicated that of the cancer patients whose clinical records were examined in Chapter 4. Like most of his contemporaries, López only decided to seek medical advice when he began to perceive his symptoms as a continuing annoyance.

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[20] Joaquín María López, "Mis horas de recuerdos", in *Colección de discursos parlamentarios, defensas forenses y producciones literarias,* Vol.6, ed. Feliciano López (Madrid: Imprenta de Manuel Minuesa, 1857), 98.
[21] Vicente Prats Esquembre, *Joaquín María López: un líder liberal para España* (Alicante: M.I. Ayuntamiento de Villena, Caja de Ahorros Provincial de Alicante y Valencia, Caja de Ahorros del Mediterráneo, 1991), 75.
[22] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 163.

After a detailed exploration of the tongue, his personal physician José Roviralta tentatively pronounced the word "scirrhus", a technical diagnostic term that usually sounded unfamiliar to common folk and did not instil the dread of cancer.[23] López, however, was a singular patient in this respect. Since his university years, he showed a craving for knowledge that included an enduring attraction for medical topics. His studies led him quite naturally to develop a professional interest in legal medicine, and especially toxicology.[24] In the mid-1830s, his personal curiosity expanded to the domain of normal and anatomical pathology.[25] In more recent times, he had also been attending a series of university lectures that questioned the foundations of homeopathic medicine.[26] On these grounds, he understood that the shadow of cancer loomed with a diagnosis of *scirrhus*. In the following weeks, the patient entertained ambivalent thoughts towards the medical judgement. For one thing, it terrified him. For another, Roviralta's hesitant tone in delivering the diagnosis, and the corresponding treatment advice he offered, provided some ground for optimism.

During the consultation, the physician recommended his patient "avoid speaking as much as possible" and "refrain from doing any intellectual activity" from that moment on.[27] López was resolved to strictly keep to these instructions, in the hope that a disciplined behaviour might lead to improvement, and, consequently, to reconsider the diagnosis. On 16th November, he wrote to the

[23] Ibid.

[24] On 6th July 1824, Professor Fulcrand César Caizergues certified in a manuscript document that Joaquín María López had followed his one year course on legal medicine at the University of Montpellier "with the greatest assiduousness"; File A.M.V. / J.M. LOPEZ 1-16, Archivo Municipal de Villena, Alicante, Spain. Back in his home country, the young lawyer carefully read and summarised a Spanish translation of the *Treatise on Poisons* by Mateo Orfila; File A.M.V. /J.M. LOPEZ 6-21, Archivo Municipal de Villena, Alicante, Spain.

[25] For instance, in 1836, López annotated the second volume of Jules Germain Cloquet's *Manuel d'anatomie descriptive du corps humain;* File A.M.V. / J.M. LOPEZ 6-17, Archivo Municipal de Villena, Alicante, Spain. He also kept a clipping of the news that the physician Benigno Risueño had been awarded the French prize "Baron Portal" for a monograph on the influence of anatomical pathology in medicine since the times of Morgagni; A.M.V. / J.M. LOPEZ 2-19, Archivo Municipal de Villena, Alicante, Spain.

[26] In April 1850, Joaquín María López was a regular assistant to the series of lectures on this subject that Professor Vicente Asuero y Cortázar gave at the Faculty of Medicine of the University of Madrid; Caballero, *Biografía del Doctor Don Vicente Asuero y Cortázar,* 45-46.

[27] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 163.

Bar Association to communicate his resignation. As he stated: "[d]ue to the bad state of my health, I see myself in the painful need of abandoning the practice of the legal profession".[28] Henceforth, Caballero noted, the sick man became a regular attendee of the *Iglesia del Carmen,* a church next to his home in the centre of Madrid.[29] To avoid conversations with neighbours, he carefully chose the times of the day in which the Catholic shrine was less frequented, and he "spent long times in there, meditating, orating, and weeping".[30] Asides from these hours of "expansion and religious solace", he sought distractions that did not involve a huge mental effort, such as "having a selection of his preferred novels read aloud" by a servant.[31]

In his lowest moments, López relied on a few number of close friends. Along with his loyal disciple Benito Gutiérrez and his posthumous biographer Fermín Caballero, he received the support of two other political colleagues of the *Partido Progresista*; namely, the prestigious lawyers Manuel Cortina and Salustiano Olózaga. Aware that sudden retirement from public life was causing their companion distress, they used their influence to have him appointed *Ministro Togado del Tribunal de Guerra y Marina,* an honorary position in the Senior Administration of Military Justice. According to Caballero, López received this "spontaneous and decorous present with the appreciation that misfortune exhales".[32] Beyond this gesture, the four men remained at his side, either in person or through correspondence, during his entire illness. They took the role that would have been expected from the wife and older children of their friend as much as possible, had he not been the head of a deeply troubled household.

In one of the many conversations that López and Caballero maintained over their years of friendship, the orator revealed that his parents had originally

[28] Ibid., 355. A transcript of López's "Renuncia a la profesión de abogado" ("Renunciation to the Legal Profession") was appended to the biography.
[29] The *Iglesia del Carmen* was located in *Calle del Carmen,* 10. López lived in *Calle de la Salud,* 9, which was only a hundred metres away; "Inventario y tasación extrajudicial hecha por D. Pascasio López, testamentario del Excmo. Sr. Don Joaquín Mº López de los bienes quedados por fallecimiento de este ocurrido en 14 de noviembre de 1855". File A.M.V. / J.M. LOPEZ 2-16, Archivo Municipal de Villena, Alicante, Spain.
[30] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 166.
[31] Ibid., 164-166.
[32] Ibid., 164-165.

arranged his marriage out of concern for his licentious inclinations, but their hopes to curb them had been to no avail.[33] As husband, he was repeatedly unfaithful to his wife Manuela, with the aggravation of public scandal. Not only did he invite successive lovers to his home in Villena, where the spouse resided permanently since the early 1840s, but he also talked "with delectation" of a natural child he fathered during one of his affairs.[34] Meanwhile, his seven legitimate children grew up mainly under the supervision of their mother, and felt both "detachment" and "resentment" towards the absent progenitor, whom they named as "*the father,* without the possessive [pronouns] *my* or *our*". Even if López always provided generously for their material needs, it was "the example and honourableness of their head of household, and his own decency", that they demanded above all else".[35] To López's sorrow, affective distance persisted during his illness, whose seriousness soon turned to be irrefutable.

By January 1855, the tongue's symptoms had not subsided. In fact, it was quite the contrary: the abnormal growth was already "the size of an almond", and it had become "painful", much to the orator's dismay. It was at this point, Caballero remarked, that his friend recognised that he had "a true cancer".[36] Within the Hippocratic tradition in which the two men were reared, this term invariably conveyed the idea of inescapable death. Neither of them ignored that "rational medicine deemed this disease as incurable" and, consequently, that "it offered no more than palliative remedies". Whilst Caballero accepted such a fate with resignation, the sick man was more willing to give up on their shared system of beliefs than to give up hope of finding a cure for his malignant condition. As the biographer recalled: "in the extreme despair of seeing himself mortally threatened, his volcanic imagination … rejected any reasoning that did not involve the security of salvation".[37] Seemingly overnight, López reframed Hippocratic medicine as a mere branch of a broader and more encouraging science of healing.

[33] Ibid., 43.
[34] Ibid., 197 and 151.
[35] Ibid., 201.
[36] Ibid., 165.
[37] Ibid., 166-167.

During the following eight months, the tormented sick man engaged with the context of a moral economy of hope in recovering from cancer that was presented in Chapter 5. How he decided to keep busy during that time allows exploring the emotional turmoil and changing expectations underlying the decisions that an individual patient made in relation to his life and illness. Firstly, López immersed himself in research on treatments for cancer that offered the "promise of a cure". Very soon, "he found out on his own" that the Spanish disciples of the Saxon physician Samuel Hahnemann – credited as the founding father of the homeopathic school of medicine – claimed to have healed "more than twenty cases of cancer".[38] According to Caballero, López "was seduced by the wonders of homeopathy in patients of his same kind" to the point of making a drastic decision. He abandoned his personal physician, a man he had known and trusted for fifteen years, to place a "blind faith" in the anti-cancer "globules" of Doctor José Núñez, who was the head of the *Sociedad Hahnemanniana Matritense* (*Hahnemannian Society of Madrid*).[39]

Until then, López had disdained the principles and effectiveness of homeopathy. As his biographer stressed, his close friends still did: after several admonitions, they managed to make him "fluctuat[e] between doubts, suspicions, and fear", until they obtained his consent to arrange further consultations with "allopathic physicians". Perhaps, they possibly argued, Roviralta had been wrong, and the orator's illness was not a cancer. Or, if it was, "rational medicine" might possess a remedy they ignored. Whatever the case may be, it was foolish to put one's health and money at risk by trusting an overconfident pseudo-physician. A two-day meeting was set for 11th and 12th February. Professor Vicente Asuero, a known detractor of homeopathy, along with a Doctor Isern and a Doctor Avilés, would jointly discuss the nature of the disease

[38] Ibid., 166.

[39] López and Roviralta knew each other since the late 1830s, from the times in which the two of them worked together as deputies of the *Partido Progresista*; *Estadística del personal y vicisitudes de las Cortes y de los Ministerios de España desde el 29 de septiembre de 1833, en que falleció el Rey D. Fernando VII, hasta el 24 de diciembre de 1879, en que se suspendieron las sesiones* (Madrid: Imprenta y Fundición de la Viuda e Hijos de J.A. García, 1880). Whilst this document does not mention that the elected deputy José Roviralta was a physician, the precision was made in the political press; "Candidatura progresista de la provincia de Barcelona de 1841", *El Constitucional,* 29th January, 1841, 1.

and the patient's corresponding therapeutic options. In the meantime, López's past convictions collided with his present anxiety. In the midst of confusion, he neither cut off contact with Doctor Núñez, nor did he interrupt his consumption of homeopathic pills.[40]

When the first day of the meeting arrived, López yearned for clear and definitive answers. Upon examining his tongue, however, the three convened physicians were reluctant to give him satisfaction. All conversation with the sick man was postponed to the following day. As Caballero understood, the team of doctors had tacitly agreed that they would remain "cautiously evasive, to avoid inducing despair in the patient". Upon noticing his pressing insistence, they eventually conceded that, "even though it was not fully demonstrated that his illness was a true cancer, the probabilities were for an affirmative case". Nevertheless, they remained truly ambiguous with respect to the curability of the condition. Caballero insightfully guessed that the physicians considered it "temerarious" to give a positive answer, whilst a negative answer was "inhuman".[41] For one thing, they believed that cancer was a dyscrasic disease, in the terms presented in Chapter 2. For another, they followed the moral instruction of behaving with Christian compassion towards the incurably ill that was mentioned in Chapter 4.

An unpublished *Memoria sobre el cáncer* (*Report on Cancer*) by Professor Asuero that Caballero read some time later shows that this physician canonically followed the Hippocratic tradition that represented cancer as a "general corruption of the blood".[42] In Caballero's terms, Asuero conceived any treatment aimed at curing a cancer patient as "useless, if not pernicious", and alleged cases of cure depended, in his view, on the misdiagnosis of "a tumour that, without being a true cancer, shares many points in common with it, and is seemingly cancerous".[43] At the time, the surgical excision of

[40] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 167-168.
[41] Ibid.
[42] Caballero, *Biografía del Doctor Don Vicente Asuero,* 110. In his biography of the physician, Caballero included a summary of his *Memoria sobre el cáncer* noting that it took him "around two and a half hours" to read the original manuscript. Attempts to locate a copy of this text were infructuous.
[43] Ibid.*,* 111.

a malignant tumour of the tongue existed as a medical procedure.[44] However, no evidence suggests that López was ever confronted with the dilemma of renouncing his organ of speech in an attempt to prolong his existence. Had he "resort[ed] to the opinion of the most eminent men of science in Spain and abroad", as the team of doctors encouraged him to do, his story might have unfolded differently.[45] Partly as a result of chance, and partly because of personal determination, none of this happened.

After the two-day meeting, López was torn. On the one hand, the most prestigious Spanish homeopath, esteemed by the Queen herself, gave him confidence in the possibility of a cure.[46] On the other hand, his most appreciated friends, whose views he had always valued, were strongly biased in favour of Hippocratic medicine. Furthermore, they considered any other therapeutic approach to disease as improper of a man of reason. In this regard, Caballero even stated that cancer illness had made López "delirious". The sick man's next move only increased his concerned friend's bewilderment. In his opinion, López "made an error that cannot be conceived of in a sane and talented man"; namely, to put his health in the hands of fate. Finding himself unable to make up his mind, the sick man wrote the words *allopathy* and *homeopathy* on two cards, rolled the bits of paper up, put them at the bottom of a hat, and picked one up randomly. The chosen card read *homeopathy*. Without any further thought, he cut off all ties with the physicians Asuero, Isern, and Avilés, and he remained a patient of Doctor Núñez.[47]

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[44] For instance, in 1840, the surgeon Manuel Santos Guerra published a case of "excision of the two third frontal parts" of a cancerous tongue, with "entirely happy success"; Manuel Santos Guerra, "Cirugía práctica. Cáncer de la lengua; extirpación de los dos tercios anteriores del órgano en masa; restablecimiento de tres interesantes funciones casi abolidas, masticación, deglución y uso de la palabra; éxito completamente feliz", *Boletín de Medicina, Cirugía y Farmacia,* 1840, nº 23 (20th August): 4-5. Likewise, in the early 1850s, González Olivares performed the "excision of the left half part" of a cancerous tongue, which resulted in a "complete healing" of the surgical wound; González Olivares, "Asignatura de Clínica Quirúrgica. Memoria firmada por el catedrático de dicha asignatura José González Olivares. Curso de 1852 a 1853", in *Memorias de las clínicas redactadas por los respectivos catedráticos*, 313.

[45] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 168.

[46] José Núñez was one of the consulting physicians of Queen Isabel II, as mentioned in Sociedad Hahnemanniana Matritense, *Anales de la medicina homeopática,* Vol. 3 (Madrid: Imprenta a cargo de D. Antonio Pérez Dubull, 1854), 427.

[47] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 167-168.

Time of Remembrance

López's confidence in the homeopathic treatment did not last long, however. During the following weeks, the course of illness kept progressing instead of going into remission. Therefore, as Caballero noted, his friend soon became "an enemy of the globules". This last bitter disappointment brought a qualitative change to his illness experience. He did not abandon the prospect of a cure, but this goal took the form of a conscious strategy of self-delusion. Once he abandoned Doctor Núñez, López decided that he would move to his hometown in the countryside of Alicante. In conversations with his intimate friend, he maintained that "native airs and nature", "memories of his youth", and the proximity to "the agricultural labour of his taste" might achieve "what he did not expect from mankind anymore".[48] He made similar claims in his letters to the Administration of Military Justice. On 4th April, he was allowed four months of sick leave "to recover his health".[49] In spite of these optimistic statements, he was nonetheless beginning to prepare the arrangements for his last will and testament.

In parallel to organising to move to his new residence, López was determined to face a sensitive issue that troubled his consciousness. As Caballero revealed, he considered it "a matter of honour" to secure the future of his beloved illegitimate daughter, who was then six years old.[50] On 22nd March, López managed to convince his elder son Pascasio to assume the legal responsibility of guaranteeing the economic stability of the child until her marriage. For the adulterous father, this secret commitment was a pre-requisite to the official testamentary dispositions concerning his wife and legitimate children. As he was married in joint-property terms and Manuela would not move from her residence in Villena, it became imperative for him to travel to his hometown to reach an agreement on the distribution of their common possessions and

[48] Ibid., 169.
[49] Manuscript document from the Secretary of the Supreme Court of War and the Admiralty; File A.M.V / J.M. LOPEZ 1-41, Archivo Municipal de Villena, Alicante, Spain. The exact date of the Royal permission was specified in another manuscript document issued by the Ministry of War; File A.M.V. / J.M. LOPEZ 1-40, Archivo Municipal de Villena, Alicante, Spain.
[50] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 169.

assets. The negotiation was in all likeliness difficult, judging by the amount of time that it took. On 12th May, the spouses finally signed their joint-testament in the notary. Some days later, López appended a private codicil with the provisions for his extramarital child.[51]

At that time, the sick man was persuaded of the irreversibility of his illness, and writhed in melancholy. Instead of raising his spirits, as he had wishfully imagined, the view of his native land had become a mirror of his sorrow. So great was the emotion that he captured it, quite poetically, in the codicil itself. The end of the legal document read:

> Let us finish once and for all. When everything is seen from the horizon of the grave; when the thoughts and writings in a gentle afternoon of the month of May, in the middle of a field whose breeze fluttering the leaves of the trees seems to produce an endless weep; and when every pain that we feel in the merciless hands of illness is like a knocker reminding us that we are at the doors of eternity and that we are going to cross them; then, everything is seen in a mournful and sinister way. Farewell, my dear: may God protect your innocence in infancy and your virtue in the adult age.[52]

López delved further into his thoughts and feelings towards cancer death in the autobiography he began to write during his last months of life. Awareness of having a fatal condition that stemmed precisely from his tongue had constrained him to renounce both to his sensual desires and to his professional projects; that is, to all that was most precious to him as a healthy man. In light of this circumstance, the passing of time became almost unbearable to him. As he wrote: “[t]he duration of an hour is not equal for all individuals. It is an instant for those who enjoy themselves and a century for those who suffer”.[53] Furthermore, he conceived slow but inevitable decay as more burdensome than death itself. In his words: “the future that is late in coming is one hundred times worse than the moment that will destroy us”.[54]

[51] Ibid., 169-171.
[52] Ibid., 363. A full transcript of the codicil was appended to the biography.
[53] López, “Mis horas de recuerdos”, 108.
[54] Ibid., 109.

When López looked back on his life in search of a unitary meaning, he found it unequivocally in the driving force of his passion for women. As he stated, in retrospect:

> I believed that love is life; more than life, in fact, because it is a sentiment … intense, profound, immortal like the heart from which it rises, infinite like the enchanted regions in which it loses itself …. and the end of love is the end of a man".[55]

Although the gifted orator had held this intimate conviction for long, he did not always express it in terms so sublime. Caballero remembered several occasions in which his friend was rather prosaic when this topic was raised in conversation. Apparently, he used to claim, "with great seriousness, *that he would find it impossible to survive the day in which his impotency was declared*".[56] Whichever way López phrased it, Caballero did not doubt that "illegitimate romances" were the "favourite passion that coloured the good and the bad of his whole existence".[57] At best, the biographer wondered if they might not have been at the very origins of his outstanding talent as a public speaker. As he commented: "[w]ho knows if, in the absence of romantic passion, he would have ceased to be the elegant and flowery orator, ardent and poetic, whom the world praises?".[58] At worst, he viewed licentiousness as "this cardinal vice in the life of Joaquín María".[59]

Before his final illness, López did not consider to be at fault with regard to the damage caused to his family. Whenever Caballero accused him of moral deviance, he "claimed to be right, and exonerated himself from the admonitions of friendship". Not only that: the unremorseful adulterer presented himself as a victim to be pitied. In 1852, he invited Caballero and his spouse to spend their holidays in Villena. Upon witnessing for themselves the way in which Manuela treated him, López secretly wished, the couple would finally realise that they had been profoundly unfair to their friend. Some time later, he confessed this intention in a letter addressed to Caballero's spouse:

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[55] Ibid., 115.
[56] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 195.
[57] Ibid., 194.
[58] Ibid., 250.
[59] Ibid., 193.

> Asides from the pleasure of having Fermín at my side, I longed for the trip, so that he could see the things for himself …. Now that it has happened, I believe that you will be more indulgent with me, and that instead of giving me reprimands, you will regard me with compassion. And the truth is that I need it.[60]

López only re-evaluated the image he had of himself during his last months of life. The last pages of his unfinished memoirs pointed to the emergence of conflicting inner thoughts. As he wrote, succinctly: "[r]emembering that chronicle [of past loves], I do not know if I feel pain or shame".[61] On the one hand, the certainty that his days of romance had gone by made him sorrowful. On the other hand, he began to acknowledge his failure as a role model for a righteous head of household.

In the early days of the summer, López interrupted this grievous exercise of introspection to concentrate once again on the prospect of a cancer cure. Although he was not at all naïve about his condition, self-delusion made his remaining days more tolerable. As he acknowledged in his autobiographical writing: "my present is hardly pleasant; my future looks gloomy; my mind rejects both of them and only focuses on magical or, at least, comforting perspectives".[62] It was not long before he fooled himself into a new trip. This time, the chosen destination was the mineral spring of Trillo, a spa town in the province of Guadalajara. Over the course of July, he shared this project with Caballero in the following terms:

> I intend to go the baths of Trillo, in which I have seen prodigious cures for illnesses like mine. How good would it be if I found my remedy in some corner of the *Alcarria,* a name that I really like, as it resembles the blissful Arcadia of the ancients! If I have to speak the truth, I trust this [remedy] more than anything; because nature is wide, immense, wise, [and] honest, whilst men endeavour in vain to discover its secrets, substituting reliable norms for dubious theories.[63]

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[60] Ibid., 197.
[61] López, "Mis horas de recuerdos", 115.
[62] Ibid., 99.
[63] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 215. This was the last letter that the sick man "could handwrite himself" to his friend. No evidence suggests that López had already visited the spa town of Trillo before the year of his death. Perhaps he just read about cases of recovery from cancer in the medical press. See, for instance, J. Salgado, "Hidrología española. Establecimiento de aguas y baños

With an extensive and successful career in law and politics at his back, López was undoubtedly a master of persuasion, even to himself. At the same time, his final sentence conveyed the bitterness that he still felt towards those physicians who had been unable to sustain his hope in the possibility of escaping from the clutches of cancer death.

Should there be any doubt left, the alleged wonders of nature were of no avail to him. On 10th August, a correspondent to the newspaper *La Época* published a discouraging report on his state of health. The article read: "[i]n spite of the prodigious effects of these waters, the situation of Joaquín María López is desperate. The cancer in the tongue that the eloquent orator suffers from is gaining terrible proportions".[64] About a week later, his thermal treatment was suspended. Upon his return to Madrid, the general press reported even worse news. On 22nd August, another contributor to *La Época* asserted: "the former Prime Minister Joaquín María López ha[s] come back from the baths of Trillo … in a deplorable state: he has lost the ability to speak and the cancer is spreading to his whole face".[65] From the moment that the sick man resettled in the capital, Benito Gutiérrez and Manuel Cortina spent day and night at his side. Caballero, who had working obligations outside of the city, nonetheless stayed regularly informed of the evolution of his friend, who by then had less than three months to live.

At this point, López had been able to accept his imminent death and to take the corresponding testamentary dispositions. In contrast, he had been incapable of coming to terms with the disastrous impact that his past record of extramarital affairs had on his family life. Whenever emotional pain became overwhelming, he made every effort to push it aside by focusing on self-delusional prospects of cancer cure. Besides expanding on the variety of publicised anti-cancer treatments that were examined in Chapter 5, exploring his successive attempts to find a cure confirms that the medical marketplace created something more than a space of resistance to cancer death. For those patients who had already

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mineralo-medicinales de Carlos III en la villa de Trillo. Cáncer de la lengua. Hemiplejia. Curación", *Boletín de Medicina, Cirugía y Farmacia* 233 (16th June, 1850): 4-6.

[64] ["Escriben de Trillo"], *La Época,* 10th August, 1855, 3. One day later, similar news were published in the newspapers *La España*, *La Iberia,* and *La Nación*.

[65] "Noticias generales", *La Época,* 22nd August, 1855, 4.

give up on hope in recovery, it still provided an opportunity to avoid acknowledging sensitive issues – both to oneself and to others – that were found to be more distressing than death itself. In López's particular case, the question *Why me?* seemed to resist an answer that would connect the illness of his tongue to a penitence for past sinful behaviour.

Arguably, the renowned orator and notorious seducer reflected further upon this reversal of fate during his last weeks of illness. Day by day, the course of symptoms sunk him into a deeper state of isolation, which forced him to remain alone with his thoughts. Well before extinguishing his life, cancer extinguished his voice. Upon receiving the news that López "hardly managed to be understood, and this [situation] caused him anger and despair", Caballero imagined the ordeal through which his friend was going through. As he stated:

> He who had been celebrated for the clarity and energy of his language, he who was admired for his verbosity by all those who listened to him in public or in private, saw himself reduced like the deaf-mute to the mimicry of gesture and to making signs with his hands! [66]

Losing the faculty of verbal communication was hard to bear for anyone. Nevertheless, it had to be especially tragic for a man whose professional recognition, social esteem, and seductive charm depended above all on his oratorical skills. According to Caballero, López only managed to find solace through "his regular attendance to [the church of] *El Carmen*". [67] Several acquaintances reported seeing him "on his knees in a corner of the temple, with his eyes fixed on the sanctuary and his spirit absorbed in worship".[68] As long as the sick man was well enough to leave his house, he did so to have inner conversations with the Lord.

At the beginning of November, the course of symptoms eventually confined López to the sick room. Just like most cancer patients in a cachectic stage of illness, he had to endure both severe pain and the stigma of deep festering facial sores, in the terms presented in Chapter 4. Drawing on the testimony of the two common friends who cared for him during his agony, Caballero

[66] Caballero, "Vida del Excmo. Sr. Don Joaquín María López", 172-173.
[67] Ibid., 173.
[68] Ibid., 190.

described the atmosphere of López's antechamber of death in quite graphic terms. As he wrote: "in the last days of his existence … cruel pain and repugnant fetidity smashed into his few assistants, in a most lugubrious, heart-breaking, and intolerable scene".[69] These and other details that the biographer provided might be considered as insensitive towards the memory of a special companion. At the same time, however, they paid tribute to the selflessness of his devoted carers. With regard to this issue, Caballero stressed:

> This friend [Manuel Cortina] well proved the pureness of his affection by attending to the sick man, in the company of the young Benito Gutiérrez, and making up for those of us who were absent. He had to suffer much at the bedside of a bereaved fellow who aroused compassion and despair, who understood everything in spite of being himself unintelligible, who scared others away and reeked.[70]

The attitude of these two men, who put their lives on hold to care for a dying friend, provides a compelling example of altruistic love triumphing over aversion towards the sight and smell of cancerous ulcers.

Significantly, their absolute dedication contrasted with the behaviour of López's wife and legitimate children, the youngest being close to the adult age. Besides the fact that none of them remained at the side of their head of household over the course of his fatal illness, the great majority – including Manuela – also refused to bid him a final farewell. As Caballero detailed, "[geographical] dispersion and, more sorely, the long-term deterioration of the bonds of mutual union made that, upon the demise of the master, only three family members were present".[71] Up until the end, López's time of remembrance was marked by the lack of forgiveness of his spouse and descendants. In Caballero's words, his friend endured "domestic misfortune … to the grave".[72] When the time of the last rites came, shame for his past irreligious behaviour definitively replaced the pain of nostalgia for his days of sensual pleasure. Or, at the very least, cultural

[69] Ibid., 232.
[70] Ibid., 216.
[71] Ibid., 175.
[72] Ibid., 50.

pressure made him express this idea to his confessor. According to his testimony, López expired "repenting of a whole life of licentiousness".[73]

As final remarks on López's story, it has to be noted that his elevated socio-economic status had an influence on his thoughts, feelings, and behaviour towards cancer illness. For instance, the burden of bringing financial ruin to his household was never a significant concern, and he did not have to seek admittance into a hospital to receive palliative care. In these and other respects, López's experience contrasts with those of the working-class patients reported in clinical records. Nevertheless, it also highlights the realms in which cancers remained democratic conditions during the period under analysis. Not even the finest education entailed the recognition of their earliest symptoms. The greatest fortune could not guarantee a cure. Were they cultured or illiterate, rich or poor, Spaniards diagnosed with one form or another of malignancy faced life disruption and the need to make sense of their illness. In light of the above, it becomes clear that the singularity of each cancer narrative lay in the concatenation of specific illness events, interpreted from the perspective of a unique biographical background.

[73] Ibid., 190.

II.6.3. Visual Narratives

Whilst López's illness experience was characterised by poor communication with his wife and children, both Ada Lovelace and Alice James lived through cancer accompanied by their closest relatives. Notwithstanding disagreements with the mother in the case of the former, and geographical distance to the older brother in the case of the latter, these and other family members were their main interlocutors. Much the same could be said of a majority of sick people all across Western Europe, and perhaps especially those belonging to southern Catholic countries. Hence, strong family ties cannot account for the decision of displacing the focus of attention outside of the Spanish context. As explained at the beginning of this chapter, the case studies of these two women who lived through cancer in Victorian England have been selected because their respective last known portraits can be presented as a visual cancer narrative. In each case, there was a meaningful gap between the state of things seemingly portrayed and actual illness experience, which can be explored through a comparative analysis.

In late July 1852, Augusta Ada King, Countess of Lovelace, commissioned the painter Henry Wyndham Phillips to make a portrait of her. Ada's will followed a domestic consultation with the obstetrician Charles West. Reported intermittent periods of great pain in the womb and profuse haemorrhages, along with a hard swelling, led him to diagnose a *cervical cancer*. This medical judgement corroborated the pessimistic suspicion that two other physicians had shared with Lord Lovelace fifteen months previously. In addition, West stated that the patient did not have long to live.[74] During the weeks following this news, Ada posed for Phillips almost daily in a living room of the property that the Lovelace marriage owned in London's West End. At her request, she was painted in profile, concentrated in playing a piano score. Traces of severe chronic illness were visible in her pronounced skinniness, the absence of formal hairstyle, and the house clothes she wore. Otherwise, Ada looked composed, and even, maybe, showing a hint of a smile **(Figure 6.3)**.

[74] Langley Moore, *Ada: Countess of Lovelace,* 292 and 304-305. On Ada's previous diagnoses of uterine cancer, see also Stein, *Ada: A Life and a Legacy,* 217.

Figure 6.3 Henry Wyndham Phillips, *Ada Lovelace,* 1852, painting, 19 x 15.5 cm. Unknown private owner.

Almost four decades later, Alice James had her portrait taken in similar circumstances of health. In May 1891, the surgeon Andrew Clark, who was Head of the Cancer Department at Middlesex Hospital, in London, was requested to examine a growing lump in her breast. Although he did not pronounce the word *cancer,* his expert judgement left no room for doubt. Shortly after the domestic consultation, the sick woman wrote down in her diary several of his statements, such as "nothing can be done for me but to alleviate pain" and "it is only a question of time".[75] In search of a second opinion, Henry James asked the physician William Wilberforce Baldwin to examine his sister's tumour. In late July, this family friend declared that Alice had a primary *cancer of the*

[75] Edel, *The Diary of Alice James,* 207. Entry dated 31st May 1891.

liver, which had spread to her breast.[76] Upon confirmation of the incurable and deadly nature of her illness, the sick woman decided to have a daguerreotype portrait done.[77] This photograph greatly contrasted with Ada's painting. Alice posed leaning back in an armchair, with head and shoulders elevated on a pillow, downcast eyes, and a grimace of malaise **(Figure 6.4).**

Figure 6.4 Alice James in the year before her death, 1891. Daguerreotype photograph reproduced in Bernard Yeazell, *The Death and Letters of Alice James.*

As she posed for her last known portrait, one of these women was struggling to come to terms with cancer, whilst the other much welcomed the diagnosis. Contrary to what might be expected on the grounds of the juxtaposed description of the two pictorial expressions, it was Ada who felt tormented and low-spirited, whilst Alice was exultant with the diagnosis. Interestingly, these two

[76] Alice reported the news to her brother William in a letter dated 30th July 1891; Skupskelis and Berkeley, *The Correspondence of William James,* Vol. 7, 183. On the friendship between Baldwin and the James' family, see Bernard Yeazell, *The Death and Letters of Alice James,* 189.

[77] Alice reported her visit to the daguerreotype studio in an entry of her journal dated 3rd September 1891; Edel, *The Diary of Alice James,* 218-219.

Victorian women shared a number of biographical circumstances that had a decisive impact in their respective experience of cancer. Firstly, they were raised in an upper-class milieu and had successful men of letters amongst their direct relatives. Secondly, they had an extensive past history of nervous or psychosomatic illnesses. Finally, they connected this illness history to their life purpose within the framework of their family background. That being said, their self-image and long-term expectations could not have been more different. Awareness of having cancer cut Ada's life project short. Conversely, it fulfilled Alice's. As it will now be detailed, each portrait crystallised a singular process of acceptance of cancer death.

Ada Lovelace

Augusta Ada Byron was born in 1815 as the only child of a brief and bitter marriage between the Romantic poet Lord Byron and Anne Isabella Milbanke, an aristocrat of strict Puritan morals. The relationship ended barely a month later, and Ada did not see her father ever again. Out of rancour for her husband's mood swings and straying ways (especially of rumours of incest with his half-sister), Lady Byron planned a scientific education for her daughter in an attempt to alienate her from any tendency towards romantic excess. When Ada turned eighteen, she was encouraged to engage in collaboration with the mathematician Charles Babbage, who was working on a computing machine referred to as the Analytical Engine.[78] Their long-term connection is at the roots of her current celebration as the first computer programmer.[79] What is perhaps less known is that she alternated periods of absorption into mathematical study with periods of equal enthusiasm for musical and poetic composition, and that

[78] Stein, *Ada: a Life and a Legacy,* 1-37.

[79] In the mid-twentieth century, early electronic computer scientists were acquainted with Babbage-Lovelace works on the Analytical Engine. However, it would be far-fetched to state that these works exerted an influence on modern computation. On this issue, see Doron Swade, "Turing, Lovelace, and Babbage", in *The Turing Guide,* coord. Jack Copeland (Oxford: Oxford University Press, 2017), 249-262. In 1979, the US Department of Defence named a programming language ADA as a symbolic homage to the Countess of Lovelace. This fact, in conjunction with the growing field of Women's Studies within the History of Science discipline, possibly accounts for her being known as the first computer programmer, in a loose usage of the term.

dreams of grandeur ran through her immersion into these different activities all throughout her adult life.

Despite Lady Byron's persistent admonitions, Ada was persuaded of possessing natural gifts inherited from her paternal lineage, and was very desirous to couple these with an intensive dedication in order to achieve unparalleled fame and renown. Significantly, neither her marriage with William King-Noel – who soon after became Earl of Lovelace – nor the consecutive birth of three children between 1836 and 1839 limited the scope of her ambitions. For instance, in an early 1840s letter addressed to Andrew Crosse, an amateur scientist within her community, she commented:

> All is as usual here; I play as much (on the harp) perhaps more than ever, and I really do get on gloriously. You known that I believe no creature ever could WILL things like a *Byron*. And perhaps this is at the bottom of the genius-like tendencies in my family. We can throw our *whole life* and *existence* for the time being into whatever we *will* to do and accomplish. You know perhaps the family motto, "*Crede Byron*" [*Trust Byron*]. I think not inappropriate, and especially when united with that of the Kings, "*Labor ipse voluptas*" [*Work is Pleasure*]. Now as I have married that motto, both *literally* and in my whole ideas and nature, I mean to do *what I mean to do*.[80]

At that time, her efforts mostly concentrated on preparing for an artistic career. In a correspondence with her husband, she went as far as stating – with the same absolute lack of modesty – that "poetry, in conjunction with *musical composition,* MUST be my destiny and *if* so, it will be poetry of an *unique* kind; far more *philosophical* & higher in its *nature* than aught the world has perhaps yet seen".[81]

Ever since childhood, Ada suffered from a variety of nervous conditions that caused vivid symptoms, such as headaches, gastritis, tachycardia, spasms, asthma, and temporary leg paralysis.[82] Over the years, this succession of

[80] This letter was included in a posthumous unsigned article titled "Byron's Daughter" that was published in the magazine *The Argosy*, November,1869, 359, as referenced in Langley Moore, *Ada: Countess of Lovelace,* 221.
[81] Lovelace Papers 166, fol.1 [1842]. Quoted in Stein, *Ada: a Life and a Legacy,* 167-168.
[82] Langley Moore, *Ada: Countess of Lovelace,* 20-21, 26, 158, 211, 240; Stein, *Ada: A Life and a Legacy,* 283-286.

illness episodes led her to develop an ambivalent relationship between pain and creativity. In some occasions, she complained of physical impairment as an insurmountable obstacle to the cultivation of her natural talent. For example, in another letter to her spouse, she declared:

> I do not see how, with my particular constitution, I can ever do any good in the world. It seems to be a *physical impossibility* for me to carry on *anything* CONTINUOUSLY. The objects most liked at one time, may at any moment be *hated*. For instance I detest now both my Harp & my Studies …. I am one of those genius's [*sic*] who will merely run to grass.[83]

On other occasions, however, she considered her ill health as the driving force behind any expression of her endowments. In 1843, she shared this idea with her mother in the following terms:

> I do not believe I shall ever henceforward be very free from suffering, for any long period …. But then I am perfectly content, *if* (as I incline to think) this is the necessary condition of all that wonderful & available mental power which I see grounds to believe I am acquiring …. Give me *powers* with *pain* a million times over, rather than *ease* with even *talents* (if not of the highest order).[84]

This is not to say that Ada refused painkiller medication. In fact, she possibly longed for its prescription. In the mid-1840s, she praised the inspirational effect of opium in yet another letter to her husband. As she stated, enthusiastically: "it makes me so philosophical".[85]

However, Ada seemed to use much more ink in writing to her beloved ones about her high-reaching projects than in actually bringing them about. In 1843, she translated and annotated an article by the Italian mathematician Luigi Menabrea on Babbage's Analytical Engine, which appeared in Richard Taylor's *Scientific Memoirs.*[86] This original publication was well received in her

[83] Lovelace Papers 166, fol.200, Letter from Ada to Lord Lovelace, n.d. Quoted in Stein, *Ada: a Life and a Legacy,* 162-163.
[84] Lovelace Papers, Letter from Ada to Lady Byron, 25th July 1843. Quoted in Langley Moore, *Ada: Countess of Lovelace,* 185.
[85] Lovelace Papers, Letter from Ada to Lord Lovelace, 6th January 1844 or 1845. Quoted in Langley Moore, *Ada: Countess of Lovelace*, 214-215.
[86] Luigi Menabrea, "Sketch of the Analytical Engine invented by Charles Babbage", trans. It., with original notes, by A.A.L., in *Scientific Memoirs, Selected from the*

community, but the computing algorithm included in her "Notes" was never tested during her lifetime. Asides from this scientific contribution, her known works comprise little else than a book review and a few poems.[87] Without denying that she was a most capable woman, there are grounds to suggest that she might sometimes have talked overconfidently about her genius in an attempt of freeing herself from family constraints and moral reprobation. Notably, in 1851, she lost several thousand pounds to horse racing, supposedly as a way of testing a mathematical system for gambling.[88] Furthermore, she had a secret affair lasting several years with John Crosse, who was the son of her scientific acquaintance, and a dilettante student himself.[89]

Whatever the case may have been, Ada's declared aspirations came to an abrupt ending upon awareness of impending cancer death. Even if months of progressive decay had somehow prepared her to accept the fatal diagnosis, she struggled to come to terms with it. The journal that King-Noel kept during the following weeks reported his wife's insistence in that the Lord assigned a purpose to every human being. For example, on 2nd August 1852, he wrote about her understanding that "all lives had in the view of their creator their use and mission – [and] that they ended when that was over".[90] Given this outlook, he added, Ada wondered what her achievement could have been. She reflected on "how incomplete all here [on Earth] was – how pervading the mind of the Deity and yet how inscrutable His designs…".[91] Meanwhile, her mother had a clear idea on the matter. Upon the daughter's confession of her extramarital relation, Lady Byron considered "that the greatest of all mercies shown her had been her disease – weaning her from temptation & turning her thoughts to higher and better things".[92]

Transactions of Foreign Academies of Science and Learned Societies, and from Foreign Journals, ed. Richard Taylor (London: Printed by Richard and John E. Taylor, 1843), 669-731.

[87] Stein, *Ada: a Life and a Legacy,* 278.

[88] Ibid.*,* 210-215, 257, and 276.

[89] Ibid.*,* x-xii, xix, 149-153, and 230.

[90] Somerville Papers, Lord Lovelace's Journal, entry dated 2nd August 1852. Quoted in Langley Moore, *Ada: Countess of Lovelace,* 306.

[91] Somerville Papers, Lord Lovelace's Journal, entry dated 2nd August 1852. Quoted in Langley Moore, *Ada: Countess of Lovelace,* 306.

[92] Lovelace Papers, Letter from Lady Byron to an unknown addressee, 8th September 1852. Quoted in Langley Moore, *Ada: Countess of Lovelace,* 312.

During the weeks she sat for her last known portrait, physical pain worsened Ada's emotional distress. In spite of consuming morphine regularly – or precisely because of long-term use – she was unable to sleep more than one or two hours at night, and she had frequent nauseas that prevented her from eating.[93] According to her loving spouse (who was ignorant of her adultery), playing some music was the only activity that distracted her a little from her suffering. On 29th July, he commented that Ada found "a great relief" in "sitting at the piano for a few minutes and playing over on it some of the airs [that used to enchant all those who heard them]".[94] Nevertheless, he also observed that there were days in which Ada had to summon up all her strength and will power so that Phillip's visit would not be in vain. On 14th August, he noted: "the suffering was so great that she could scarce avoid crying out". Still, she posed for the artist so he could paint her hands.[95] Ada's determination indicates that she had the utmost interest in the fast completion of the portrait. This, in turn, reveals that it was most meaningful to her.

It could be suggested that the sick woman aimed at crystallising her past dream of performing successfully in a public venue. However, a number of elements of the representation, such as the lack of appropriate clothes and hairstyle, along with the absence of a fictional stage and audience, are at odds with this idea. In all likelihood, the key to the interpretation of the portrait was not in the scene depicted but in its authorship. It was no coincidence that Ada had chosen to pose specifically for the painter Henry Phillips. She wanted him because he was the son of the painter Thomas Phillips, who famously portrayed Lord Byron twice during his youth.[96] Ada's willingness for a connection with her father – and, more broadly, with what she understood as a Byronic legacy – was not limited to this single event. In parallel to contacting Phillips, she also

[93] Langley Moore, *Ada: Countess of Lovelace,* 306.
[94] Sommerville Papers, Lord Lovelace's Journal, entry dated 29th July 1852. Quoted in Langley Moore, *Ada: Countess of Lovelace,* 305.
[95] Sommerville Papers, Lord Lovelace's Journal, entry dated 14th August 1852. Quoted in Langley Moore, *Ada: Countess of Lovelace,* 312.
[96] Langley Moore, *Ada: Countess of Lovelace,* 83-84 and 312. In 1813, Thomas Phillips portrayed Ada's father in an Albanian dress. A replica of the portrait is currently exhibited at the National Portrait Gallery, London. A year later, the Romantic poet sat again for Phillips in a white shirt under a dark coat. At present, this second portrait is possibly in a private collection.

corresponded with Colonel Wildman, who was an old friend of the poet, to inquire about the possibility of being buried besides him in the family vault of the Church of St. Mary Magdalene, in Hucknall, Nottinghamshire.[97]

Arguably, stressing the bond with an alleged inheritance of features that were characteristic of the paternal side of her family allowed Ada to interpret cancer death in a way that was significant for her at three different levels. Firstly, it reiterated the claim that she possessed indisputable intellectual faculties and artistic abilities, notwithstanding a perceived failure to materialise them into an extraordinary achievement. Secondly, it linked the circumstances that accounted for the impossibility of fulfilling her ambitious projects with a family curse. The Byrons, she believed, tended to die early and in pain. She knew that her father succumbed to illness during a military campaign in Greece when he was thirty-six, which was exactly her age. Furthermore, she had recently discovered that her grandfather – the British Army officer John Byron, who was nicknamed "Mad Jack" – died when he was thirty-five.[98] Following the loss of the only aunt she had on her father's side, a few months previously, she also confessed to her mother: "I do dread that horrible struggle, which I fear is in the Byron's blood. I don't think we die easy".[99]

Finally, Ada's belief in an inevitable family destiny exempted her from taking responsibility for her moral flaws. She was fated to be unfaithful, just like she was fated to an early and hard death. According to Lady Byron, the Lord had sent the cancerous illness on her as a punishment for past sins and as an opportunity for redemption. Ada possibly pondered this idea for some time whilst she was having her portrait done, but she eventually found it too overwhelming. In late August, she was delusional for two days. Upon her recovery, she confronted her mother. As Lady Byron reported, Ada upheld "that her *father* had sent her this disease", and "she spoke of it as cruel, and unjust of God to allow it".[100] Self-ascription to a paternal legacy undeniably possessed a disquieting side. Overall, it nevertheless seemed more bearable than the

[97] Ibid., 312.
[98] Ibid., 305.
[99] Letter from Ada Lovelace to Lady Byron, 15th October 1851. Quoted in Toole, *Ada: The Enchantress of Numbers*, 398.
[100] Langley Moore, *Ada: Countess of Lovelace,* 243-244.

maternal Puritan views. In sum, despite the calmness that Ada's portrait apparently conveys, a succinct approach to her actual experience is revealing of a titanic effort – both physical and emotional – to make sense of cancer death in her own terms. She would die three months later, on 27th November, and be buried in the Byron's vault, as were her wishes.

Alice James

At the time of Ada's death, Alice James was three years old and lived in a well-off family of Irish descent settled in New York. She was the youngest child and the only girl of five siblings who cared about each other and stayed in contact over the years whilst pursuing their individual goals. During the 1860s, her two oldest brothers, William and Henry, went to Harvard University, and the other two, Wilkie and Bob, fought with distinction in the American Civil War.[101] Meanwhile, Alice stayed at the parental home with increasing health problems. In 1868, she had her first serious nervous breakdown. From then onwards, she lived through an endless succession of psychosomatic illnesses, with diagnoses as varied as "spinal neurosis", "fainting spells", "nervous hyperaesthesia", and "strangely paralyzed legs".[102] Their lack of resolution was a source of much anxiety throughout all her adult life. In a diary entry dated 27th September 1890, she complained: "these doctors tell you that you will die, or recover! But you don't recover. I have been at these alternations since I am nineteen, and I am neither dead nor recovered".[103]

Unlike Lord Byron's daughter, Alice never associated her dysfunctional body with the mind set of a creative genius. Nevertheless, persistent ill health was also of the utmost significance in shaping her life project. On 24th June 1891, just a few days before Doctor Clark diagnosed her with an incurable and deadly tumour, the diarist highlighted her lifelong "curious, given my inheritance and surroundings, complete absence of intellectual curiosity". Right after, she made

[101] Jane Maher, *Biography of Broken Fortunes: Wilkie and Bob, Brothers of William, Henry, and Alice James* (Hamden, CT: Archon Books, 1986), 202.
[102] Bernard Yeazell, *The Death and Letters of Alice James,* 2.
[103] Edel, *The Diary of Alice James,* 142. Entry dated 27th September 1890.

clear that her existence had certainly not been devoid of purpose. On the contrary, she saw it as consistently driven by "one motive, the active principle conceived in youth and never modified".[104] Alice's rationale went back to "that hideous summer of '78", which was to become the turning point of her life.[105] At that time, she had a second major nervous breakdown. So great was her anguish that she gave up all hope in finding a cure for her various illnesses, and she even entertained suicidal thoughts. Eventually, however, she rejected the idea of putting an end to her life. Instead, she decided to dedicate the rest of her days to preparing for her natural death.[106]

From then on, Alice spent much time making her last will and testament. She also planned her own funeral with a wealth of detail. This whole process was anything but solitary. Not only did she receive unconditional support on the part of her relatives, but she also relied heavily on her intimate friend Katharine Peabody Loring, for whom she moved to London. Once there, Alice continued to update her arrangements. On 26th November 1890, she addressed a letter to William's wife in which she asserted, with all seriousness: "I am working away as hard as I can to get dead as soon as possible so as to release Katharine …. The trouble seems to be there isn't anything to die of".[107] Half a year later, her morbid wish was finally granted. Four days after Clark's medical visit, she opened the entry of her journal with the following enthusiastic exclamation: "[t]o him who waits, all things come! My aspirations may have been eccentric, but I cannot complain now, that they have not been brilliantly fulfilled".[108] As unusual as it may seem, she was even more delighted when she heard Doctor Baldwin pronouncing the word *cancer*.

Interestingly, the principal reasons that accounted for the usual dread of malignant conditions were precisely those that made Alice rejoice upon the confirmation of the nature of the disease she had. First, and most significantly, cancers were always fatal if left untreated, unlike all the illnesses she had

[104] Ibid., 216. Entry dated 24th June 1891.
[105] Ibid., 230. Entry dated 2nd February 1892.
[106] Bernard Yeazell, *The Death and Letters of Alice James,* 18-21.
[107] Letter from Alice James to Alice Howe James (nee Gibbens), 26th November 1890. Quoted in Bernard Yeazell, *The Death and Letters of Alice James,* 46-47.
[108] Edel, *The Diary of Alice James,* 206-207. Entry dated 31st May 1891.

endured in the past. Second, cancers produced anatomical lesions that had an indisputable location within in the body. Therefore, no doctor could dare to argue that she had developed yet another somatisation disorder. Alice yearned for this medical recognition. Several years before, she already mentioned that "[t]here is some comfort in good solid pain" in a correspondence to her brother William.[109] Following Clark's visit, she delved further into this issue in an entry of her journal. On 31st May 1891, she wrote:

> Ever since I have been ill, I have longed and longed for some palpable disease, no matter how conventionally dreadful a label it might have, but I was always driven back to stagger alone under the monstrous mass of subjective sensations, which that sympathetic being "the medical man" had no higher inspiration than to assure me I was personally responsible for, washing his hand of me with a graceful complacency under my very nose. Dr Torry was the only one who ever treated me like a rational being, who did not assume, because I was victim to many pains, that I was, of necessity, an arrested mental development too.[110]

Arguably, there were chances that the experience of cancer pain would make her change her mind. Thanks to opioid medication, in conjunction with Katharine's loving kindness and diligent care, she nonetheless managed to remain consistent with her past thoughts, as shown in the final entry of her journal.[111] On 4th March 1892, only two days before her death, she dictated the following words to her friend and nurse:

> I feel sure that the bewildered little hammer that keeps me going will very shortly see the decency of ending his distracted career; however this may be, physical pain however great ends in itself & falls away like dry husks from the mind, whilst moral discords & nervous horrors sear the soul.[112]

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[109] Letter from Alice James to her brother William, 11th December [1887]. Quoted in Bernard Yeazell, *The Death and Letters of Alice James,* 36.
[110] Edel, *The Diary of Alice James*, 207. Entry dated 31st May 1891.
[111] For details on the palliative care that Alice received – both chemical and emotional – and her response to it, see, amongst others, Edel, *The Diary of Alice James,* 208 and 225. Entries dated 5th June 1891, and 1st January 1892, respectively. See also the letter from Katharine Peabody Loring to William James dated 30th July 1891. Reproduced in Skrupskelis and Berkeley, *The Correspondence of William James.* Vol. 7*,* 183.
[112] Bernard Yeazell, *The Death and Letters of Alice James,* 44. Entry dated 4th March 1892.

Finally, Alice was enthusiastic at the thought of having a chronic, slowly mortal illness. On 1st June 1891, she stated in her journal that "[h]aving [death] to look forward to for a while seems to double the value of the event".[113] Furthermore, in a letter she addressed to her brother William two months later, she wrote: "I count it as the greatest good fortune to have these few months so full of interest & instruction in the knowledge of my approaching death".[114]

Alice did not merely wish to die. She also intended to make the most of whatever time she had left. In her view, this meant to keep track of and record her thoughts, feelings, and sensations whilst she prepared the setting for a perfect dying scene and rehearsed for her leading role within it. In order to achieve this ultimate goal, the sick woman cared about three essential elements. To begin with, she hoped to die at the right *time*. The culmination of her life project was deemed as important an event as any of her brothers' achievements. Hence, it should not overlap with a scheduled family engagement. For example, shortly before the London premiere of the theatrical adaptation of Henry's novel *The American,* Alice considered: "I don't want to immerse him in a deathbed scene in his 'first night', too much of an aesthetic incongruity!".[115] Although timing was beyond her control, finding the right *location* was within her reach. The hotel suite she and Katharine shared was certainly not appropriate, "it not being aesthetic to die in a hotel". Moving to Henry's apartment seemed a much better alternative, and so she did.[116]

Last, but not least, Alice was concerned with interpreting the role of an agonising woman successfully. In this regard, she worried particularly about her facial expression. On 2nd February 1892, she noted in her journal:

> I have always *thought* that I wanted to die, but I felt quite uncertain as to what my muscular demonstrations might be at the moment of transition, for I occasionally have a quiver as of an unexpected dentistical wrench when I fancy the actual moment.[117]

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[113] Edel, *The Diary of Alice James,* 208. Entry dated 1st June 1891.
[114] Letter from Alice James to her brother William, 30th July 1891. Quoted in Bernard Yeazell, *The Death and Letters of Alice James,* 43 and 187.
[115] Letter from Alice James to Alice Howe Gibbens, 26th November 1890. Quoted in Bernard Yeazell, *The Death and Letters of Alice James,* 42.
[116] Edel, *The Diary of Alice James,* 150. Entry dated 7th November 1890.
[117] Edel, *The Diary of Alice James,* 230. Entry dated 2nd February 1892.

In all likeliness, the issue was also present six months before, when she had her last known photograph taken. On this occasion, however, she deemed that her grimace conveyed exactly the impression of malaise that she expected to be able to reproduce in her actual deathbed. On 7th September, she was so delighted upon seeing her daguerreotype portrait that she opened the entry of her journal with the following exclamation: "*Mes beaux restes* have returned from the photographer in refulgent beauty!".[118] The French words in italics deserve clarification. For one thing, *avoir de beaux restes* was a humorous way of stating that a person still had beauty. For another, the term *restes* was a shortened synonym for *mortal remains*. Alice was fluent in French, and she possibly made a play on words.

In early autumn, two copies of the photograph crossed the Atlantic Ocean in William's suitcase after a visit to his sister. Once back in the US, the older sibling sent the second copy to their mutual friend Frances Rollins Morse, at Alice's request. The attached note left no doubt about the rhetorical function of the pictorial expression. As William wrote: "I'm glad I went over, if only to have as pleasant an image as will now abide with me of the *scene* of her last months".[119] In his view, Alice's portrait represented the perfect incarnation of a dying woman, in a most positive sense. The image foreshadowed the outcome of a life project he respected and supported, much like the rest of the James family. In turn, the fact that Alice presented the photograph to her distant loved ones is indicative of the importance she gave to their continuous approval. Unlike most people with cancer, suspicion of the diagnosis did not trigger a move from *separation* to *liminality*, but from *liminality* to *reincorporation*, in her case. Still, the meaning she gave to her condition was worthless unless shared with significant others.

In light of the above, both Ada and Alice might be considered extravagant women, each for a different reason. Whilst the creative ambition of the former seemed to have no limits, the latter turned a morbid wish to die into her raison

[118] Edel, *The Diary of Alice James,* 219. Entry dated 7th September 1891.
[119] Letter from William James to Frances Rollins Morse, 19th October 1891. Reproduced in Skrupskelis and Berkeley, *The Correspondence of William James.* Vol. 7*,* 209.

d’être, and found pleasure in preparing for death and dying until the end. Perhaps, however, what is so extraordinary about them is not so much the way they thought and felt, but the persistent efforts they made to communicate their ideas and emotions to their relatives and friends. Below the surface, Ada and Alice were nothing more than inhabitants of their time and place. In a general sense, they can be regarded as two clever upper-class women who accumulated gender-related diagnoses of elusive conditions within a male-dominated society, whilst trying to find a symbolic space of their own where to make free, autonomous decisions. The analysis of their respective last known portrait certainly shows determination to make their voices heard. This also implies that self-evaluation was not done in isolation, but in conversation with close ones, whose internalised voices – either critical or supportive – must be considered as an intrinsic part of each cancer narrative.

CONCLUSIONS

The object of this thesis was to explore the experience of cancer illness during the decades that preceded the emergence of malignant neoplasms as a matter of national interest and governmental concern in Western countries, with special – though not exclusive – attention to the Spanish people who lived through the diagnosis in one form or another of malignancy. Overall, this investigation had three general goals; the first of these related to the ontology of disease; the second concerned the epistemology of illness experience; and the third pertained to the social relevance of conducting historical research into these areas. In simple terms, the specific questions that the present study sought to address can be restated as follows: Is cancer something more than, and different to, its current medical definition? How can experiences of cancer illness be accessed? What possible value does an immersion into the ways people lived through cancer in the past has for us? Based on the evidence presented in the different chapters, the following discussion provides concluding remarks on these issues.

Drawing on a number of historiographical and clinically-oriented scholarly contributions to the ontology of disease, this thesis argued for the consideration of illness experience as a proper space of existence of cancer, as significant and distinct as its scientific representation. Perhaps, the progression of the chapters was in itself eloquent with respect to this matter. In any case, it deserves to be insisted upon. Within Part I, Chapters 1 and 2 were principally concerned with a review of milestones in the intellectual history of cancer. This is tantamount to saying that the analysis focused on the views of prominent researchers and practitioners of the past on the pathogenesis, diagnostic criteria, prognosis, and therapeutics of the pathological processes which they deemed cancerous. Needless to say, a great deal of additional information – also including aetiological perspectives – can be found in the specialised literature on the subject. Nonetheless, a history of medical ideas and practices

will still constitute the experience of cancer disease, understood as the human definition of and interaction with a scientific object.

Chapter 3 moved on from medical views of malignant growths to their popular understanding. This part of the research was intended to provide a transition from the analysis of cancer as *disease* to that of cancer as *illness*. On the one hand, it showed that some knowledge about the salient features of the disease – preceding its reconceptualization as a class of conditions united by a common cellular pathogenesis – circulated widely amongst the population of Spanish Catholic faithful during the period under examination. Above all, lay views focused on the symptomatology, prognosis, and therapeutics of external ulcers in an advanced stage of malignancy. On the other hand, the evidence pointed to several issues at the margins of scientific representation. For example, an analogy was found to exist between a mastectomy and martyrdom. Additionally, there was a widespread belief that the Lord could send a malignant condition as a penitence for past sins, a proof of faith, and an opportunity for redemption. Furthermore, popular beliefs about divine intercession also pertained to the miraculous cure of cancer.

In Part II, cancer was no longer approached as an object of *knowledge* – either scientific or popular – but as an object of *meaning*; that is, as a life-changing event that needed to be made sense of. Arguably, this shift of perspective required not only broadening the scope of research to include lay beliefs, but also structuring the discussion in accordance to distinct criteria of analysis. In other words, illness experience was deemed to possess characteristics of its own, both in content and form. This is not to say that sick people's thoughts, feelings, and behaviour were unrelated to the existing knowledge about cancer as disease. It is rather to say that, to a great extent, cancer as illness could only be appropriately examined by changing the way those questions were posed. For instance, both the questions "What is the aetiology of cancer?" and "Why did I develop cancer?" refer to the issue of causation, but they possess different implications. Likewise, the questions "What are the diagnostic signs of cancer?" and "How am I going to live with cancer symptoms?" relate to similar bodily alterations, but they call for different answers.

Four broad criteria of analysis structured the research conducted in Part II. Following Kleinman's anthropological approach to the study of chronic illness, each chapter focused on a specific level of illness meaning. Chapter 4 considered issues regarding the interpretation of symptoms, from the onset of illness to the end-of-life stage. Chapter 5 explored the interpretation of the disease label, in connection to subjective explanations for the origins of illness, and to the possibilities of recovering health asides from consenting to an operation. Chapter 6 delved into the re-evaluation of biographical memories, self-image, and life-purpose upon awareness of having cancer. A fourth, transversal level of illness meaning concerned its intersubjective negotiation with relevant others, including practitioners, father confessors, relatives, friends, and acquaintances. Surely, different criteria could have been chosen. Nevertheless, they would have significantly overlapped with those proposed above in terms of providing a basic, comprehensive framework for addressing experiences of cancer illness.

On the basis of Moscoso and Broncano's independent but convergent programmes of research into the epistemology of experience, the second aim of this thesis was to substantiate the claim that the ways in which people with cancer could possibly live through their illness were necessarily grounded in the historical context they belonged to. Hence, mind, body, and culture were not considered individually as separate entities, but in the way in which they intertwined. In turn, subjects and objects were understood as constituted by and constitutive of one another. For one thing, objectifications of cancer bear traces of past subjective experiences. For another, new subjective experiences depended on the internalisation of existing objectifications. Whether these expressions were accepted uncritically, contested, or re-signified, they provided the conditions of possibility for the elaboration of individual narratives of illness. As meaningful objects, they possessed both a palpable and a symbolic materiality, with the latter referring to the crystallization of a commonality of beliefs, expectations, rules of conduct, and related practices.

Objectifications of cancer stemmed from a variety of realms, and a corresponding polyphony of voices. Medical science and its clinical

practitioners received most attention for a number of reasons. To begin with, the idea of having cancer arose from either an external diagnosis deemed authoritative or a self-diagnosis based on existing popular knowledge. In order to avoid presentist assumptions, a precondition to address the former issue was to trace the semantic field of cancer-related diagnostic terms during the period under analysis. As stated in Chapter 1, the most common were *scirrhus, encephaloid, melanosis, sarcoma,* and *epithelioma*, along with *carcinoma* and *cancroid*. Although these terms can all still be found in contemporary oncological literature, their use at the patient's bedside has changed. Up to the late-nineteenth century, Spanish practitioners seldom performed a pre-surgical biopsy. Therefore, diagnoses of malignant conditions remained largely based upon a cluster of macroscopic anatomo-clinical signs instead of a set of features of a microscopic cellular tissue.

Besides tracing cancer-related diagnostic terms and discussing their context of use in medical practice, significant absences in relation to current scientific knowledge also had to be accounted for. Notably, a thread of continuity has run through the defining characteristics of *leukaemia* from the mid-nineteenth century to the present. However, the hypothesis that this condition was actually *cancer of the blood* was not formulated until the late 1880s, and its acceptance in the medical community was far from immediate. Consequently, leukemic patients lacked grounds for understanding themselves as blood cancer patients. With regard to the experience of malignant conditions of the chest cavity, the problem was different, though it had similar implications. For one thing, *lung cancer* did exist as a diagnostic term. For another, it was rarely, if ever, used before autopsy. Overall, data for registered cancer incidence showed that its most frequent anatomical locations were facial organs, women's breasts and reproductive apparatus; and, to a minor but increasing extent, organs of the digestive apparatus.

Other insights into past medical theory and practice served to discuss the foundations of the popular knowledge of cancer that circulated in Spain. To a significant extent, lay views merged pre-modern medical representations of the disease with Catholic beliefs. In Chapter 2, the idea of cancer as a

voracious animal was linked to animalomorphic descriptions of the condition by ancient physicians, and to the hagiography of the Patron Saints of medicine Cosmas and Damian. In Chapter 3, the idea of cancer contagion was traced back to two convergent processes. Firstly, Avicenna's statement that "leprosy is a cancer of the whole body" had an enduring influence on rules for admission into leper houses. In parallel, it favoured that the Patron Saint of cancer Peregrine Laziosi became known as the "new Job". Secondly, late medieval uses of the Latin form *cancrena* both for *gangrene* and *cancer* resulted in the introduction of the latter term in a number of pre-Reformation translations of the New Testament. Once cancer entered the realm of Biblical diseases, it was characterised as a condition that spread by miasmic contagion.

Medical views on the pathogenesis, prognosis, and therapeutics of malignant conditions were also relevant for contextualising the experience of people with cancer. Even if Spanish common folk did not see cancerous conditions as cellular disorders, this scientific reconceptualisation had effects upon the world they inhabited. As shown in Chapter 2, operability became synonymous with curability in cancer clinical therapeutics. Furthermore, the simultaneous processes of normalisation of chemical anaesthesia, antisepsis, and asepsis in hospital surgery increased the chances of actually curing cancer patients. The use of these agents allowed undertaking longer and, as such, more exhaustive operations; venturing into internal cavities of the organism; and lowering the risk of post-operative death. Ultimately, however, successful operations largely depended on the possibility of both making early diagnosis and performing early surgery. The reasons for why this seldom happened in practice cannot be properly evaluated without taking doctors' voices into consideration, but they go beyond their understanding of cancer as disease.

The above considerations have stressed the relevance of conducting a critical review of milestones in the intellectual history of cancer in order to frame illness experience. On another note, a distinction must be drawn between the object of enquiry of a disciplinary perspective and the evidence upon which researchers in that field base their investigations. That is to say, the sources traditional to the intellectual history of cancer can also be reread in light of different research

questions so as to tell new stories. Quite often, medical writing did not merely document scientific knowledge about disease. It was also indicative of a genuine concern for the patients' views about their illness. Whether at the beginning of their career or after decades of professional practice, many were the doctors who made illuminating remarks about the recurring thoughts, feelings, and behaviour amongst the sick people under their care. Furthermore, medical cases of cancer patients captured "illness idioms", both verbal and non-verbal. Albeit in mediated from, these individual expressions allowed gaining insight into significant facets of illness experience, which both preceded and transcended the moment of the consultation with a doctor or the duration of hospital stay.

In large part, this thesis relied on medical sources, ranging from treatises on general pathology and surgery, to medical deontology textbooks, popular medicine manuals, annual reports of hospital practice, and, last but not least, collections of clinical records. Nevertheless, the objectifications of cancer presented throughout the different chapters also belonged to social realms other than medicine. In the field of sciences, nationwide mortality statistics examined in Chapter 1 informed the emergence of malignant neoplasms as a matter of public health concern to Western European governments at the turn of the nineteenth century. Moreover, substantial increase in registered cancer deaths during the previous decades suggested that it became increasingly more common for laypeople to develop an awareness of one form or another of malignancy through the case of a person from their community. In addition, the joint discussion of Spanish population censuses and statistical reports on causes of death conducted in Chapter 5 provided grounds to characterise cancers as diseases of ageing.

Given that most of the research conducted focused on the Spanish context, it seemed reasonable to look for objectifications of cancer in the religious realm especially. As stated in Chapter 3, Spain was a nation of churchgoers, and the Catholic worldview permeated all aspects of people's life, including illness. Through the voices of priests and theologians – which crystallised in multiple forms, including hagiographies of saints, books of prayers, and parish

sermons – common folk both learned some of the salient features of cancerous diseases and found meaningful ways to live through cancerous illness. At the same time, the language of religion was also crafted by secular hands, and spoken by voices other than those of religious officials and scriptures scholars. With regard to the former issue, both renowned artists and anonymous artisans produced a variety of devotional items that played a major role in the cult of the Patron Saints of cancer. With regard to the latter, a number of novelists and playwrights contributed to the literary theme of the social cancer. Furthermore, as seen in Chapter 5, other men of letters created fictional characters that contracted physical cancer as a consequence of sinful behaviour.

Whilst clergymen and moralising writers made use of medical semantics in order to either provide or reflect standards of moral righteousness and virtue, medical ethics were based on the observance of religious principles and the incarnation of religious values. Notably, Chapter 4 pointed to the practitioners' duty of showing Christian compassion to the incurably ill, as well as to their religiously informed understanding of euthanasia, in connection with the limits posed to the prescription of narcotic painkillers. Meanwhile, contributors to the general press spoke highly of fellowmen who endured intractable cancer pain with Christian resignation. At the same time, praise to such a model of conduct encountered condemnation of suicide as its reverse side in the chronicles of other journalists. Insofar human life belonged to the Lord, they argued, putting a deliberate ending to one's own life was a crime; and, more precisely, a self-homicide. Uncritical press reports of miraculous cures of cancer presented in Chapter 5 further indicated the extent to which Catholic beliefs and practice were ingrained in Spanish society.

The realm of law, and, more broadly, that of both public and private health-related regulations, also produced objectifications of cancer illness. For instance, Chapter 4 showed that cancer patients were excluded from admission into hospitals for incurable and invalid people due to social aversion that their deep festering sores caused. This 'gut reaction' was markedly grounded on the foul-smelling odour that malignant wounds exhaled and the consequent fear of their miasmic contagion. Furthermore, moral philosophers

and pedagogues' books on rules of civility created attitudes and values whereby people with non-disguisable cancerous lesions were treated as outcasts virtually everywhere and by everyone in society. A notable exception was the hospitals in which members of religious congregations who designated themselves as servants of the sick poor volunteered. Whilst the great majority of people deemed ulcerated cancer a deeply discrediting attribute, both the Brothers of the Association of Saint Philip Neri and the Sisters of Charity of Saint Vincent de Paul were likely to conceive of these lesions as the stigmata of Christ. Hence, they assisted their carriers with great care.

The existence of a competing medical marketplace, examined in Chapter 5, suggested that cancer illness was a lucrative business. More importantly, however, the analysis of the variety of anti-cancer remedies advertised in the press showed that these publicities were consistently intended to keeping common folk's dread of cancer surgery alive, whilst simultaneously sustaining a moral economy of hope in the possibility of regaining their health. Sellers knew their clients' profile well. For one thing, their advertisements drew on the sources of anxiety of patients who pondered the risks involved in an operation, which ranged from surgical pain to permanent disability – if not post-operative death – without even the guarantee that their illness would not reproduce. For another, they targeted the despair of the patients who were declared incurable. Hence, non-surgical remedies were invariably said to be infallible, relatively painless, and devoid of peril and undesired effects. The journalistic coverage of the rise and fall of the exemplary fraudster Doctor *Negro* allowed considering the thoughts and feelings that the sick people who spent a fortune on his *quinine* of cancer could possibly harbour.

Most of the analysis conducted in this thesis depended on fragmentary and mediated accounts of illness experience. The presentation of evidence relied on one or another of the two following methodological approaches. The first of these proceeded from the particular to the general; that is, "illness idioms" by a variety of individual patients were assembled in order to demonstrate the existence of a common pattern. In Chapter 4, the process of falling ill was addressed in this way. Likewise, in Chapter 5, the discussion about the causes

that cancer patients subjectively attributed to their illness was partly built upon this principle. Conversely, the second approach proceeded from the general to the particular. Firstly, an issue that was deemed highly relevant – though not particular – to the experience of cancer illness was outlined. Secondly, cases of people afflicted by a malignant condition were brought into the discussion. This perspective informed the analysis of the rest of the issues examined in Chapters 4 and 5, along with that of the slow processes of normalisation of chemical anaesthesia, antisepsis, and asepsis into Spanish surgical practice that were reviewed in Chapter 2.

In order to probe into the domain of intimate life, a third methodological approach was adopted. Instead of looking for regularities across many cases of cancer illness, displacing the focus of attention to the uniqueness of each particular life story seemed to be a more rewarding option. Hence, Chapter 6 explored the re-evaluation of the personal, family, and professional trajectory that three selected historical figures respectively conducted upon awareness of having cancer, through a wide range of ego-documents, along with pieces of non-fiction-literature by both close friends and relatives. In all three cases, a material object filled with illness meaning guided the discussion. Joaquín María López's preserved tongue encapsulated a triadic relationship amongst glory, sin, and cancer, which was central to the biography that Fermín Caballero wrote in the aftermath of his friend's death, as well as consistent with autobiographical writings by the sick man himself. Whilst López's illness narrative was explored through these writings, those of Ada Lovelace and Alice James took a visual form in the portrait that each of these women commissioned shortly before dying of cancer.

The evidence presented throughout this thesis can also be re-examined in light of the general tripartite structure of experience, here applied to the case study of living through a cancerous illness. To begin with, the phase of *separation* corresponded to the period of falling ill. During the second half of the nineteenth century, subjectively interpreting one or another bodily change as illness symptoms proper invariably signalled its onset. According to the analysis of Spanish patient records conducted in Chapter 4, separation usually began with

these individuals realising that an anatomical or physiological alteration formerly viewed as transient and unimportant was actually worsening, along with the appearance of new, disquieting symptoms. In some cases, a small lump gained volume and became painful. In others, a little ulcer spread, accompanied by foul-smelling discharges. These and other courses of disease progression prompted a re-evaluation of the period in which one's own health was lost. In front of the clinician, sick people recurrently acknowledged having been diseased without feeling ill for some time.

Suspicion of having cancer triggered a move from separation to *liminality*. Within the Spanish context, this supposition derived from three different origins, at least. Firstly, it could develop by relating one's own symptoms with known signs of malignancy, with this knowledge stemming from either having witnessed a case of cancer illness in the past or being acquainted with the understanding of cancerous conditions disseminated within society at large, as stressed in Chapter 3. Secondly, suspicion could arise during doctor-patient interaction, whenever a practitioner decided against openly disclosing a cancer diagnosis to his patient whilst simultaneously insisting upon the need for him or her to undergo a surgery. Finally, Chapter 4 also pointed to the professional duty according to which physicians and surgeons had to do everything in their power to at least confide the malignant nature of the illness to a patient's family member or friend. In those instances, any kind of mindless word or gesture on the part of the knowledgeable person within the patient's community could raise this latter's worst fears.

In contrast to mere suspicion, full awareness of having cancer depended on a degree-trained practitioner or an alternative healer openly disclosing their diagnostic judgement to the people under their care, either directly or via their patients' loved ones. Receiving this news bluntly gave rise to a more acute form of liminal existence. At the same time, however, it enabled people with cancer to make informed decisions, as well as to try making sense of having developed a malignant condition specifically. As pointed in Chapter 4, most of the clinical records examined in this thesis failed to detail whether individual patients were told the nature of their condition before or during their hospital stay. Perhaps,

a number of them died ignoring they were ever diagnosed with cancer. A significant amount of evidence gathered in this work nonetheless confirms that many others had become aware of their diagnosis at some point. Sooner or later, understanding themselves as individuals afflicted by a malignant condition impacted on their memories, self-image, course of action, and expectations, in some of the ways presented in this thesis.

The issue of moving from liminality to *reincorporation* was also approached from different angles. At one level, this discussion engaged with the variability of signs that clinicians, local doctors, empiricists, and quacks took into consideration for producing a cancer diagnosis. Significantly, a person could feel devastated at the idea of having cancer following a consultation with one of these healers, only to be told some time later by another medical man that his colleague's opinion was unfounded. This happened, for instance, to the young lady of Vigo whose case of illness opened Chapter 3. In a similar vein, Chapter 5 included several first-hand testimonies of former cancer patients that appeared in the Spanish general press. In every instance, these people explained how much they had suffered before completely regaining their health owing to either a divine intercession or a topical remedy. According to a pious man named José Martí, the Virgin Mary cured him from his cancer in the lips. In turn, Captain Major Carlos Sánchez Montes publicly praised the admirable effect of Doctor Garrido's powders in healing his stomach cancer.

At another level, some medical writings discussed in Chapter 5, along with many advertisements of anti-cancer remedies, suggested that the Spanish patients who consented to undergo an operation did so without ignoring how common a relapse was. Therefore, it is worth envisaging whether those people who recovered successfully from a cancer surgery saw themselves as proceeding into their liminal existence – albeit, maybe, experienced with milder intensity – instead of being cured. From still another perspective, which was most central to this thesis, reincorporation corresponded to the outcome of a process of coming to terms with cancer illness, including slow, inevitable death. With time, self-reflection, and conversation with significant others, a sense of meaning and purpose would likely replace a sense of loss, as the

detail of Joaquín María López and Ada Lovelace's cancer narratives showed. Lastly, Chapter 6 closed upon an entirely different form of living through malignant illness. Suspicion of having cancer – soon followed by medical corroboration – caused Alice James to rejoice. Moreover, contracting this slowly mortal condition allowed her to fulfil the life-project she had spent several decades preparing for.

Ultimately, this thesis aimed at using the past to engage with the present. Obviously, these concluding remarks are not an appropriate place for undertaking a diachronic analysis of continuities and discontinuities with contemporary experiences of cancer illness. Any intention to do so would be not only temerarious, but also unfair to both twentieth-century historians and clinicians working under the umbrella of narrative medicine, amongst other professionals. The issue that the present work intended to raise was different, however. Perhaps, it was stated, immersing ourselves into the possible ways in which (not so) historically distant people diagnosed with cancer made sense of this life-changing event can provide a complementary therapeutic tool to those that have already proven their worth in the intention of accompanying people who are currently living through cancer, along with their carers, and, more broadly, of any concerned individual. This aspiration subtended the theoretical and methodological approach to the object of enquiry that was adopted throughout this thesis.

Building on its grounds, the discussion presented in Part II was based upon the double premise that, firstly, the criteria of analysis used were stable over time, and, secondly, their corresponding objectifications were historically modulated. In other words, the questions posed were unlikely alien to the contemporary reader, whereas the answers that were given were time-place specific. Hopefully, insisting on the idea that *their* cancer was not exactly *our* cancer could help to reduce anxiety towards the topic under examination, which often remains taboo in conversation. Admittedly, some parts of the reading could still be heart-breaking; in order to stay true to historical evidence, several aspects in which having cancer was particularly tough to bear could not be left out from the account. At the same time, however, historical rigour could by no means be

separated from sensitivity towards both the protagonists of this thesis and its readers. Under no circumstance was it deemed appropriate to probe into the struggles that the former underwent if not to open the way for a critical reflection upon the cultural meanings of cancer that we ourselves live by.

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